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Entrepreneurship in Rural Malaysia: An Investigation of Handicraft Producers in Sabah Region

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A thesis submitted in partial fulfillment of the requirements for PhD in Entrepreneurship

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List of Abbreviations

AIM - Amanah Ikhtiar Malaysia

BPU - Entrepreneurship Development Section

C1 - Cluster 1

C2 - Cluster 2

C3 - Cluster 3

EDOs - Entrepreneur development organisations

GDP - Gross Domestic Product

INSKEN- National Institute for Entrepreneurship

MARA - Council of the Trust for Indigenous People of Malaysia

MECD - Ministry of Entrepreneur and Co-operative Development

MHDC - Malaysian Handicraft Development Corporation

MITI - Ministry of International Trade and Industry

MRRD - Ministry of Rural and Regional Development

ODOP - One District One Product

PLI - Poverty Line Income

PUNB - Perbadanan Usahawan Nasional Berhad

SME - Small and Medium Enterprise

Abstract

This research investigates the commercialisation processes of handicraft producers in Sabah, Malaysia, and the factors influencing their development and performance. The Malaysian government encourages handicraft production as a full-time activity in dedicated workshops, but the vast majority of producers stay part-time and home-based. The aim of this research is to understand why so few producers switch to a greater level of commercialisation, despite government support. From the literature review, it is found that a combination of person-related and contextual factors influences small enterprise development and performance, but handicraft producers in a developing country context have different characteristics to the firms usually studied in entrepreneurship, so they may follow different development paths. Therefore, qualitative research was carried out (in-depth interviews with 16 handicraft producers), which aimed to understand deeply from the producers' point of view how they made choices about their enterprises, and the factors that encouraged or inhibited their move to full-time status or workshop premises. It was found that interviewees perceived part-time domestic production to be convenient and flexible, and workshop production to be a big commitment, although factors such as level of perseverance and social networking were influential to these. In the interviews, a complicated relationship between status, premises and enterprise performance was also found. A face-to-face survey was then conducted of 210 handicraft producers in Sabah region, which aimed to test quantitatively the factors that influence producers' status, premises and performance, and the relationships between them. Through cluster analysis, three groups of producers were identified: (i) 'high performance full-timers', (ii)'part-time professionals' and (iii) 'part-time home workers'. The first group contained both domestic and workshop-based producers, all full-time status, and showed highest levels of sales and profits. It was interesting to find that part-time professionals had lower profit levels than part-time home workers, even though almost all part-time professionals produced in workshops, half of them in government assisted workshops. One way ANOVA tests found significant differences between the clusters on thirteen person-related and contextual factors, including producers' (i)education level, attendance in craft incubator, previous income activity, (ii)self-confidence, perseverance, (iii)skills relating to production, organising and networking, (iv)income maximisation motivation and (v)access to government supports, financial resources and reliable workers. The evidence from the research shows that handicraft producers in Sabah region see many advantages in domestic production, and profit levels can be higher than in workshops. By identifying the different profiles of handicraft producers in Sabah, and the person-related and contextual factors that influence them, this research may help the Malaysian government to develop effective support policies for different types of handicraft producer, including how to encourage more individuals to become 'high performing full-timers'.

Chapter 1 Introduction

1.1 Background to the Study

This study seeks to investigate the behaviours and business choices of handicraft producers in Sabah, Malaysia and the factors that influence their levels of commercialisation and performance. Sabah is the second largest of the thirteen states in Malaysia, occupying the northern part of the island of Borneo. It has a population of over 3 million people, half of whom live in rural areas (Population and Housing Census of Malaysia, 2010). Since the 1990s, Sabah has been the poorest state in Malaysia, despite its vast wealth of natural resources, arguably due to extensive imbalanced land and socio-economic development projects implemented by the political elite in the region. Currently, half of the income for Sabah's economy comes from the services sector, with tourism-related, wholesale and retail trades (especially handicrafts and home-stays) as the main contributors. The Malaysian government, in cooperation with non-governmental agencies, is promoting entrepreneurship among rural people to encourage them to earn their living from activities other than farming and cultivating, in order to enhance the economy in Sabah by making good use of the diverse natural resources and local cultures of the Sabah people. As part of this, the development of small scale handicraft production has received much attention from the government, particularly in terms of provision of financial and technical support for commercialising production. Currently, there are more than 2,000 handicraft producers found in Sabah, throughout twelve main districts, specializing in the production of local village craftwork. The activity of making handicrafts is predominantly amongst women, mainly in hand-woven materials (batik and weaving, embroidery) while men are actively involved in the production of metal-based handicrafts (machetes, brass-gongs) and wood carving. The vast majority of handicraft producers in Sabah make handicrafts in a modest way, on a part-time basis or at home, and only very small numbers operate their production full-time in dedicated workshops.

Entrepreneurship can be defined as a process of development of enterprises through shifting social and economic resources from the environment into commercialisation (Drucker, 1985). It has been widely recognised by many

politicians and economists that the natural home for entrepreneurship is the small-scale enterprise sector. In developed regions like Western Europe for example, the interest in the development of small enterprises has been influenced by their possibilities to contribute to economic growth, innovation and job creation (North & Smallbone, 1996; Wennekers & Thurik, 1999). Meanwhile, the role of entrepreneurship in developing countries, especially in deprived regions, has been viewed more crucially as a key strategy to combat poverty (Harper, 1991; Berma, 2001). In these countries, the development of small enterprises is usually supported by the government, not only through provision of financial assistance, but also through development of human capital, i.e. skills and knowledge (Harper, 1991; Berma, 2001). The effect of government assistance can be important, for example Sarder, et al (1997) in their study of small enterprises in Bangladesh found that firms receiving support services from the government experienced significantly higher growth in sales and employment than non-assisted firms. Therefore, in many developing countries, various efforts for the development of small enterprise, such as education and training, financial and credit assistance, and physical and social infrastructure development, have been undertaken by the government, especially by local authorities wanting to stimulate rural people to earn their living through new businesses. Nevertheless, it is acknowledged that the external infusion of support and facilities from various institutions may not always promise successful entrepreneurial performance (Nijkamp, 2003). In rural areas for instance, communities who have traditionally relied on agricultural-based activities for their living would possibly be ambivalent about engaging in activities beyond their known expertise or environment. Moreover, small enterprises in rural areas are exposed to greater challenges than enterprises in urban areas due to their remoteness, especially in terms of constraints in infrastructure, skilled labour and motivation (e.g. North and Smallbone, 1996).

The increasing interest in entrepreneurship has evolved to a focus on more sustainable growth strategies in regions, e.g. endogenous growth strategies (Wennekers & Thurik, 1999), Many countries are emphasising endogenous growth approaches for the development and performance of small enterprises in their regions, particularly through inculcation of entrepreneurial spirit and mindset among

local communities to inspire them to make good use of their production know-how to generate continuous, sustained benefits (Begley, et , 2005; Kader, et al, 2009). These approaches encourage governments to emphasise facilitating strategies through investments in research and development, education, training and knowledge centres, to support local people in rural areas to create their own businesses based on their local natural resources and own cultural heritage that can potentially generate more income for themselves, family and community (Terluin, 2003; Nijkamp, 2003). It is believed that through this approach, more successful entrepreneurial activities will be developed in rural areas, which may contribute to better long term economic growth.

1.2 The Research Problem

In Malaysia, particularly in Sabah, one of the endogenous growth strategies that has been followed by the government is the One District One Product (ODOP) program, which aims to encourage rural entrepreneurs to convert the available natural resources in their district/village, using local experts and their creativity, to produce resource-based and cultural-based products for commercialisation (Kader, et al, 2009). Under this program, the government facilitates the rural communities with advisory services and technical training, which aim to develop their business knowledge and interest towards commercialisation for community-based tourism production, like village-stay, handicrafts and local food. The key objective of the ODOP program is to encourage greater levels of commercialisation. In the small-scale handicraft sector for instance, handicraft producers are encouraged to increase the level of commercialisation of their handicraft production, towards full-time and workshop production instead of modest, informal production (part-time/home-based). In fact, full-time workshop production is strongly viewed by the government as genuine business activity, which is able to provide significant contributions to incomes and economic development compared to part-time, home-based production.

Nevertheless, despite the government's aim to encourage formal commercialisation of handicraft production, and the financial and technical supports it has put in place, the vast majority of handicraft producers in Sabah remain as home-based and part-time producers. To date, it is not understood why, despite its perceived disadvantaged status, 'modest' production is so favoured among handicraft

producers in Sabah over formal commercialised production. There are many possible reasons, for example, relating to the knowledge, skills or motivations of the producers, or their family situations and other sources of income, or resources and investments required for greater commercialisation. But to date, no investigation of these issues has been undertaken. It is still unknown why and how handicraft producers in Sabah make choices relating to their levels of commercialisation and how these have impacts on performance. Therefore, the current research aims to address this gap by investigating how handicraft producers make decisions on their levels of commercialisation, and how these impact producers' performance levels.

1.3 Statement of the Research Objectives

The overall aim of the research is to investigate the behaviour and business choices of handicraft producers in Sabah. This involves understanding the nature of handicraft production in Sabah, examining how and why producers make choices about the level of activity they undertake, i.e. whether on a part-time or full-time basis, or home-based or in formal premises, as well as to investigate the implications of those choices in terms of performance. Hence, the precise research objectives for the current research are as follows:-

i. To describe in detail the current nature of handicraft production in Malaysia and related government support for the sector.
ii. To identify from the literature in entrepreneurship and small firms how small firms contribute to economic development and the factors that influence the commercialisation decisions and performance of these firms, particularly in rural, developing country contexts.
iii. Through exploratory qualitative research, to investigate the perceptions and behaviours of handicraft producers in Sabah and the processes of commercialization that they go through, including factors that stimulate or prevent moves to a greater level of commercialisation.
iv. Through a large-scale survey, to investigate quantitatively the relationship between handicraft producers' status, premises and performance levels, and the factors that may influence them.

v. To offer recommendations to government and related support agencies on how to increase the effectiveness of support to handicraft production in a Malaysian context.

1.4 Research Approach

The objectives mentioned above required a research approach involving three phases of fieldwork, i.e. (i) to understand the current state of handicraft production in Sabah and fill the gaps in knowledge based on secondary/desk research, exploratory interviews with government and agency informants were undertaken, (ii) to understand in depth from handicraft producers' perspective, how they make decisions about commercialisation, in-depth interviews with handicraft producers were undertaken, and (iii) to identify quantitatively which factors significantly influence handicraft producers' status (full-time/part-time), premises (workshop/home-based) and performance (sales and profits), a large-scale survey was undertaken. The used of multi-phase fieldwork has been mentioned in many studies as a good strategy to understand further about the social world, especially for studies of the entrepreneurship process (Kothiduwakku & Rosa, 2002, Bryman, 2004). Blaikie (2000) mentions that multi-phase strategies are a more purposive approach, because every stage is conducted to address distinct but interrelated research questions, which means data in every phase can be interpreted further in the light of data gathered at another phase.

The fieldwork for this research was carried out in Kota Belud, Sabah over a period of three years. The first phase of data collection involved a local desk study and key informant interviews which aimed to describe in detail the current nature of handicraft production in Malaysia and related policy support, and to identify from the informants' perspectives the important problems or challenges faced by local people in pursuing a handicraft business. Data gathered from this first phase of research led to the identification of some major issues, e.g. noticing that some part-time, domestic producers had higher performance levels than some workshop-based producers. This led to the question of how some domestic producers were able to generate high incomes despite their disadvantaged status, whereas others who produced in a dedicated premise were not, despite benefiting from apparently favourable

circumstances. Therefore, in order to investigate further issues like this, in-depth interviews were conducted in the second phase of the research.

The in-depth interviewing involved face-to-face semi-structured interviews with 16 handicraft producers, with the aim of investigating their behaviours and processes of commercialization that they had gone through, including what influenced them to move (or not) to workshop production. Data from the in-depth interviews provided insights into the development of a conceptual framework, and set of propositions, about the types of factors that might explain handicraft producers' decisions towards commercialisation and performance. The propositions emerging from the in-depth interviews led to the development of measures for the questionnaire that was used in the third phase of fieldwork.

The third phase of fieldwork involved a survey of 210 handicraft producers in Kota Belud, Sabah, administered by face-to-face structured interviews. The aim of this survey was to investigate on a large scale the relationship between handicraft producers' levels of commercialisation (status, premise) and performance, and to test quantitatively the factors that might influence these. The main analytical techniques used were bivariate analysis, cluster analysis and One-Way ANOVA.

1.5 Value of the Research

This research intends to contribute to the body of knowledge concerning how small enterprises orient themselves from intention to start-up to greater levels of commercialisation, and the factors that are influential to those processes. From a practical point of view, the contribution of the research is to provide information to governments of developing countries, and the Malaysian government in particular about the profiles and characteristics of handicraft producers which may help them to develop more effective support policies for different types of handicraft producer.

Entrepreneurship has been identified in the literature as one of the key instruments for economic development, not only in terms of its contribution to growth performance measured by sales turnover or market expansion, but also in terms of employment generation and poverty reduction (North & Smallbone, 1996; Wennekers & Thurik, 1999). Many studies of small enterprises have been concerned with indentifying factors that influence performance (i.e. growth rate, income),

predominantly person-related factors like demographic and psychological traits (McClelland, 1987; Lee & Tsang, 2001; Baum & Locke, 2004). There is a growing interest in other studies which not only focus on internal forces as predictors of performance, but other variables external to a person, for example, the level of support of government agencies in entrepreneurial development, e.g. provision of subsidies of raw materials, production space and training facilities (Begley, et al, 2005; Kader, et al, 2009) and the role of family and friends in providing access to resources, access to new markets and skills (Davidson & Honig, 2003; Rodriguez, et al, 2009). The current research draws from both types of study to investigate both person-related and contextual factors influencing the commercialisation and performance of handicraft producers. Furthermore, some studies have argued that measuring firm performance should not be limited to direct outcomes, i.e. based on financial analysis like sales growth, or employment growth rate (e.g. Begley & Boyd, 1987; Lee & Tsang, 2001; Baum & Locke, 2004), but should also include measures of non-financial success, for example, the business owner's decisions or intention to move from one level to a greater level of activity (Frank, et al, 2007; Kessler & Frank, 2009; Townsend, et al, 2010). In fact the literature on small enterprises in rural areas contends that due to environmental constraints and remoteness, achieving improved performance is quite slow and it does not necessarily mean achieving growth, but more like survival, fit with a particular life-style (North & Smallbone, 1996), or intrinsic enjoyment like independence or a sense of accomplishment (Soldressen, et al, 1998; Berma, 2001). The current research builds on these ideas by taking into account the motivations of handicraft producers in the investigation of their performance and choice of commercialisation level.

From an academic point of view, this study makes a further contribution to the literature regarding factors influencing entrepreneurs' decisions for the development and performance of their enterprise. Although many studies have already been conducted, most are based in western developed countries and in manufacturing or technology sectors (e.g. Smith & Miner, 1983; Stanworth & Curran, 1976). Far fewer studies have been conducted of factors influencing small enterprise performance in a developing country context, or in the handicraft sector, and characteristics of both suggest that the mainstream entrepreneurship theory is not always applicable to

transfer. The current research not only studies small enterprise performance in these under-researched contexts, but also investigates the relationship to producers' levels of commercialisation. The belief in a relationship between commercialisation and performance underpins economic growth strategies, so the focus of this research gives an opportunity to test these assumptions.

From the practical point of view, this study contributes evidence about the actual profiles of handicraft producers in Sabah, and explains why despite government support for full-time workshop production, so few producers shift to a greater level of commercialisation. Both of these contributions may help the Malaysian government to develop more effective support policies for handicraft production. The explanation of actual profiles of handicraft producers, and identification of different types based on their levels of commercialisation and performance, encourages policymakers to understand the handicraft sector as heterogeneous rather than a homogenous mass, on criteria that are important to economic development. The insights into the barriers to greater levels of commercialisation, from the point of view of producers themselves, helps policymakers understand which incentives are most important to changing producers' behaviour. Overall, the current research contributes information that will allow the Malaysian government to improve support measures by showing how they could be more accurately tailored, providing the right incentives at the most critical times.

1.6 Structure of the Thesis

This thesis contains seven chapters including this chapter which has introduced the current research. Chapter 2 follows with an overview of the current state and nature of the handicraft sector in Malaysia, as well as background information on government support programs. This is then followed by Chapter 3 which reviews the literature on entrepreneurship and small firms, to explain how, in theory, small enterprises contribute to economic development, how they develop and grow, especially in a developing country and rural, handicraft context, and what factors influence their performance. Chapter 4 presents the research methodology for the study, involving explanation of the design of the different phases of fieldwork and the techniques used to collect and analyse the data needed to fulfil the research

objectives. The thesis then continues with Chapter 5 which reports the results of the in-depth interviews with handicraft producers, and Chapter 6 which reports the results of the large-scale survey. Finally, Chapter 7 concludes the thesis with a summary of findings from this research, recommendations to policymakers and limitations and avenues for future research.

Chapter 2 Handicraft Production in Sabah, Malaysia: Policy and Sector Overview

2.1 Introduction

This chapter provides information about the current state and nature of handicraft production, and its policy context, in Malaysia. The chapter draws both from relevant literature (reports and statistical data) and the results of exploratory fieldwork carried out over a period of three months in Sabah. This consisted of interviews with five key informants, four of them were senior officials in relevant government agencies in Sabah (Malaysian Handicraft Development Corporation Sabah Branch, Ministry of Rural Development and Entrepreneurship of Sabah, Sabah Tourism Board and Kota Belud District Office) and an academician (senior lecturer in Universiti Malaya, Kuala Lumpur) who had knowledge in conducting research relating to handicraft production in rural Malaysia. These informants provided valuable information on various economic development programs in rural Malaysia, as well as the current nature of handicraft production in Malaysia, particularly in Sabah. In addition, in order to gain further knowledge of the practical context of current handicraft production in Sabah, several informal conversations were conducted with four people who were able to provide preliminary understanding of the nature of handicraft production in Sabah. These were a trainer and a trainee in a handicraft incubator, a master craftsperson or *'Adiguru'*, and a handicraft shop owner. The exploratory fieldwork helped to fill some gaps in the literature, and gain a better understanding of reported statistics. The aim of the chapter is to provide an overview of handicraft production in Sabah, and the development issues that policymakers face. The chapter is structured as follows. First, the region of Sabah is introduced and briefly described. Next, the government policy and development context is outlined. The chapter then provides an overview of the profile of the handicraft sector, including sections that describe domestic and workshop producers. The chapter concludes with discussion of emergent issues relating to the research.

2.2 The Region of Sabah

Sabah is the second largest of the thirteen states in Malaysia with a population of over 3 million people. 50.5 percent of the population lives in rural areas, with almost equal proportion of males and females (Table 2.1). The region is located in East Malaysia, which occupies the northern portion of the island of Borneo (Figure 2.1).

Table 2.1: *Population of Malaysia, 2010.*

Country	Total population	Urbanization percentage		Sex ratio	
		Urban	Rural	Male	Female
Malaysia	20 124 000	67.6%	32.4%	49.8 %	48.2 %
Sabah	3,206,742	49.5%	50.5%	51.4%	48.6%

Source: Population and Housing Census of Malaysia (2010), Department of Statistics, Malaysia.

Figure 2.1: *Map of Malaysia*

Sabah encompasses 23 districts and numerous sub-districts which are subdivided into five administrative divisions (Figure 2.2), namely West Coast, Interior, Kudat, Sandakan and Tawau. Table 2.2 shows the total population of each district in Sabah and the main economic activities. The West Coast region is the most populated area, where Kota Kinabalu, the state capital of Sabah, is located. The West Coast is popular as the main commercial and industrial centre for Sabah. Tawau is the second most populated division in Sabah, where agriculture and fishing are the main economic activities, followed by Sandakan division that is popular with its oil palm

plantations. The least populated areas in Sabah are the Interior and Kudat divisions; they are the most remote districts in Sabah with more than three-quarter of the population living in the rural area. The main economic activities in these two regions are forestry, marine and highland recreation.

Figure 2.2: *Map of Sabah, Malaysia*

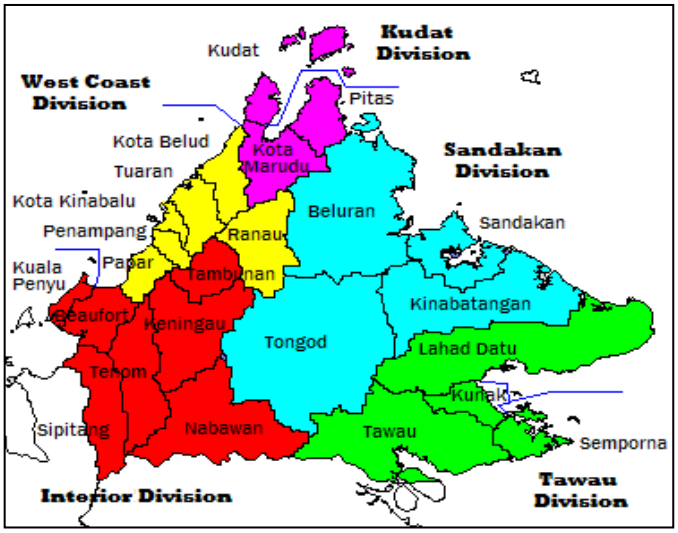


Table 2.2: *Sabah Population by Districts and Economic Activities, 2010.*

Divisions	Districts	Population	% of rural population	Administrative Centre	Main economic activities
West Coast	Kota Belud, Kota Kinabalu, Papar, Penampang, Putatan, Ranau, Tuaran	953,900	52	Kota Kinabalu	Commercial centres, paddy plantation,
Tawau	Kunak, Lahad Datu, Semporna, Tawau	756,800	51	Tawau	Agricultural, fishery activities
Sandakan	Beluran, Kinabatangan, Sandakan, Tongod	676,000	57	Sandakan	Oil palm plantation
Interior	Beaufort, Nabawan, Keningau, Kuala Penyu, Sipitang, Tambunan, Tenom	420,800	79	Sipitang	Forestry, rubber plantation, highland recreation and leisure.
Kudat	Kota Marudu, Kudat, Pitas	189,500	75	Kudat	Agro-forestry, marine and wood-based sector
Total population		3,206,742			

Source: Monthly Statistical Bulletin Sabah (July 2010), Department of Statistics Sabah, Malaysia.

The indigenous people of Sabah are called *'bumiputera'* or 'sons of the soil'; they are composed of more than 30 ethnic groups from diverse cultural and religious backgrounds. The largest ethnic group is Kadazan-Dusun, they are mainly Christians, followed by Bajau, a predominantly Muslim community. Other groups in Sabah are Chinese, Malays, Muruts and Indians. Table 2.3 shows the distribution of population in Sabah by ethnic groups. The non-citizens are mainly immigrants from West Malaysia (mainly working as government servants), Indonesia, and the Philippines. The latter two groups predominantly come to Sabah to work in manufacturing, agricultural sector, or as housemaids or servants in restaurants (Monthly Statistical Bulletin Sabah, 2010).

Table 2.3: *Sabah's Population by Ethnic Groups, 2010*

Native in Sabah	Percentage of population (%)
Kadazan Dusun	24.5
Bajau	14.04
Chinese	9.22
Malays	12.2
Murut	5.8
Indian	4.5
Other Bumiputeras	10.73
Non-citizens	19

Source: Monthly Statistical Bulletin Sabah (July 2010).

In terms of population income levels, Sabah records the highest poverty incidence in Malaysia, at 19.7%. This surpasses the overall Malaysia poverty rate of 3.8%. Table 2.4 shows Sabah is ranked as the poorest state in Malaysia with the highest poverty incidence.

Table 2.4: *Malaysian States with High Poverty Incidence,2010*

State	Incidence of Poverty (%)
MALAYSIA	3.8
Sabah	**19.7**
Perlis	6.0
Sarawak	5.3
Kedah	5.3
Kelantan	4.8

Source: Population and Housing Census of Malaysia (2010).

In terms of household income, Sabah's poverty line income (PLI) is RM 990 per month. This means, in Sabah, a household is considered hardcore poor if its monthly

household income is less than RM 990. Sabah's PLI is lower than the Malaysian average of RM 1,440 per month (Population and Housing Census of Malaysia, 2010). Table 2.5 shows the poverty line income (PLI) for Sabah and Malaysia.

Table 2.5: *Poverty Line Income (PLI) for Sabah and Malaysia, 2009-2010*

Region	Poverty Line Income (PLI) per month for 2009-2010		
	Urban	Rural	Overall
Malaysia	1,655	994	1,440
Sabah	881	897	990

Source: Population and Housing Census of Malaysia (2010).

A household with income lower than the PLI is regarded as the 'Bottom 40 percent' household income group (Population and Housing Census of Malaysia, 2010). It comprises 2.4 million people in Malaysia (12 percent of overall Malaysia population), with almost equal proportions in rural (48.6%) and urban (51.4%) areas. Half of this population have no formal education; more than half work as sales workers or machine operators in private service companies, and 42 percent of them are self-employed in agricultural or fishery sectors (Population and Housing Census of Malaysia, 2010).

In term of its economic status, historically, in 1970s, Sabah ranked as one of the richest states in Malaysia, with its vast wealth of natural resources including oil and gas, timber and fertile agricultural land. Nevertheless, since 2000s, Sabah has been the poorest of Malaysia's states. Some articles reveal that past political agendas have produced positive and negative impacts on Sabah's economy. It is argued that political interventions into village and life in Sabah, especially in conservation or development projects of natural resources, have only produced benefits for a dominant group of political or economic elites rather than for the livelihoods of Sabah people (Doolittle, 2007). As a result, income disparity and socio-economic imbalances among ethnic groups and regions are still wide in Sabah, since the 1990s (Arshad & Shamsudin, 1997). Therefore, in Malaysia nowadays, other than state government development projects, there are also various development initiatives carried out by intermediate organizations like government-linked agencies and non-government institutions, which aim to reduce poverty on a self-sustaining basis, i.e.

by increasing poor household's capabilities in production, generation of incomes and consumption.

In terms of its economic activity, before 1970s, Sabah was agricultural-based as well as the primary producer of mineral products. By the late 1980s, in order to combat poverty and high levels of unemployment, the government began to embark on rapid industrialisation and diversification programs like export-oriented activity, encouragement of foreign direct investment, employment-creation programs and resource-based industries. As an outcome of this transformation strategy, by 2000s Sabah had increased manufacturing of its resource-based products, with stronger ties to the service sector, namely technology transfer, subcontracting, transportation and communication, tourism-related activities and retailing. Nowadays, Sabah's main economic activity is the service sector, followed by agriculture and mining sector. More than half of the employed population in Sabah works in the service sector (Ninth Malaysia Plan, 2010). Table 2.6 shows Sabah's economic activities by sector and employment distribution for each sector.

Table 2.6: *Sabah's Economic Activities by Sector (% of GDP income) and Employment Distribution (% of employed population) for each Sector, 2010*

Economic Sector	% of GDP income	% of Employment
Services	53.7	53.5
Agricultural	27.07	11.8
Mining	14.55	0.4
Manufacturing	9.01	6.5
Construction	2.56	27.8

Sources of data: Ninth Malaysia Plan (2010).

In the services sector, there are four main sub-sectors which contribute to Sabah's income, namely, wholesale/retail service, government service, transport/communication and finance. Half of the proportion of income from the wholesale/retail service sub-sector is contributed by tourism-related activity, mainly supported by hospitality segment (hotels and restaurants services) and retail industry especially the cultural-based good segment like handicrafts, foods and village-stay (Sabah Development Corridor, 2008). Table 2.7 shows the sub-sectors of the services sector and their contribution to Sabah's GDP.

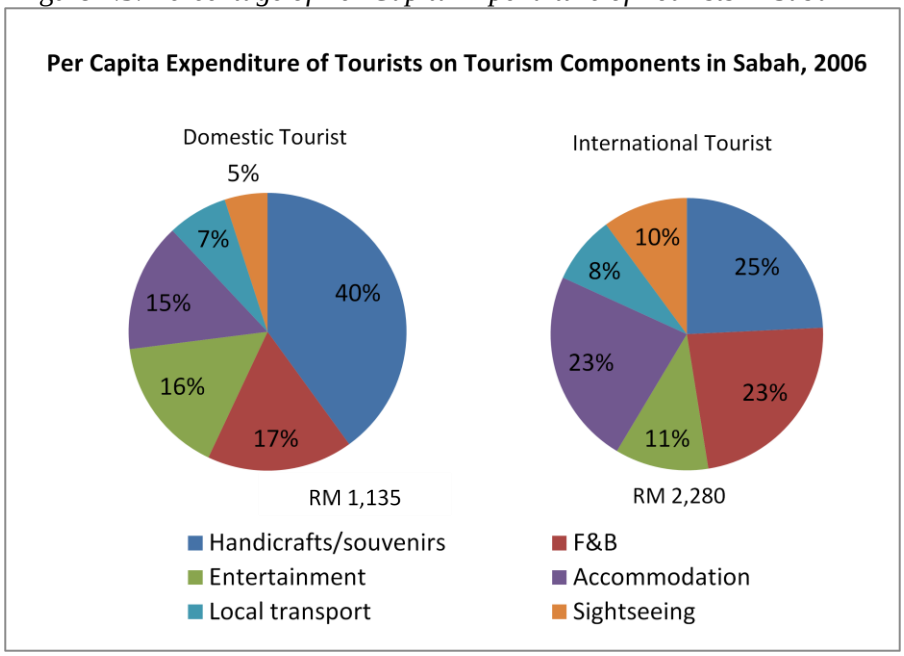
Table 2.7: *The Sub-Sectors of the Services Sector and their Percentage of Contribution to Sabah's Gross Domestic Product, 2008.*

Sub-sectors for Services Sector	Percentage share of GDP from Services Sector
1. Wholesale, retail trade, hotels, restaurants, tourism-related service	28%
2. Government service	14.7%
3. Transport, storage and communications	7%
4. Finance, insurance, real estate	4%
Total % share of GDP from Services Sector	53.7%

Source: Sabah Development Corridor (2008)

Based on the data on tourist expenditure on tourism components, it is found that in Sabah, the main tourist expenditure (for both domestic and international tourists) is shopping for cultural-based goods like handicrafts and souvenirs, followed by food/beverages, entertainment and recreation (Sabah Development Corridor, 2008). Figure 2.3 shows the distribution of tourist expenditure in Sabah.

Figure 2.3: *Percentage of Per Capita Expenditure of Tourists in Sabah*



Source: Sabah Development Corridor (2008)

In summary, this section has introduced Malaysia, particularly Sabah, in terms of geographical, political and economic background. Overall, it is found that Sabah is the lowest income state in Malaysia despite its vast wealth of natural resources. In rural areas, most households are poor and people earn their living as subsistence farmers, cultivators, fishermen, and rely on diverse plants in the forests for their

food, building materials and other household needs. Some of the main causes of rural poverty in Sabah revealed in literature are violations against native land rights by dominant political/economic elites and increases in unemployment due to low education levels. Nevertheless, based on current income and employment statistics, wholesale/retail services particularly from tourism-related activities are now key contributors to the economy of Sabah. There have been many initiatives or policy measures the Malaysian government has put in place to enhance economic development in Sabah, especially to encourage and facilitate the rural people on how to earn cash income from small-scale activities. The next section of this chapter discusses a number of policy measures for economic development in Sabah that have been implemented by the Malaysian government and related agencies.

2.3 Policy Measures for Economic Development in Sabah

The causes of high poverty incidence in Sabah involve many inter-related factors, including lack of education and skills and lack of access to productive assets or resources. Various development initiatives by the Malaysian government have been oriented to enhance the standard of living of the poor. In the past these have led to social and economic inequalities (Doolittle, 2007). Recent poverty eradication programs focus on capacity building, namely education and skills enhancement programs, facilitating access to economic and job opportunities, and increasing access to resources and credit facilities for the poor. In line with the government's aim to encourage self-sustaining economic activities as the best tool for economic growth and quality of life improvement, the initiatives are oriented towards the development of micro or small and medium enterprises, especially amongst the poor in rural area.

The Malaysian government under its small and medium enterprises (SME) Master Plan has introduced various entrepreneurship development programs to all entrepreneurs, including, skills upgrading programs, advisory services and financial planning. The three main ministries responsible for the development of entrepreneurship in Malaysia are the Ministry of International Trade and Industry (MITI), Ministry of Entrepreneur and Co-operative Development (MECD), and Ministry of Rural and Regional Development (MRRD). The MITI under its

Entrepreneurship Development Section (BPU) focuses on providing entrepreneurship development programs in terms of education and training on business knowledge and technical skills to those who are interested in starting an enterprise. The training is conducted in the National Institute for Entrepreneurship (INSKEN), with seminars, talks or short courses, especially targeted to young and new entrepreneurs.

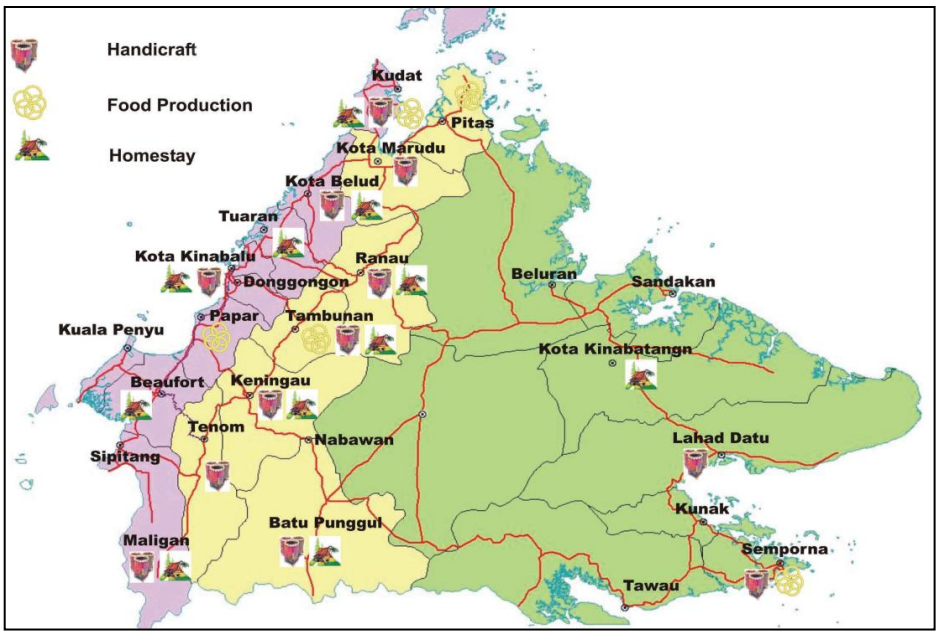
The MECD is the lead government agency in the development of entrepreneurs. Its main role focuses on providing funding and business grants to small enterprise owners for their start-up. One of the main agencies under MECD is the Council of the Trust for Indigenous People of Malaysia (MARA). This Council is responsible for educating and assisting the indigenous people in order to encourage them to get actively involved and succeed in commercial activities. The MRRD is the main government agency that plays a significant role for quality of life improvement in rural areas. Under the Master Plan for the Development of Rural Entrepreneurs, the government has allocated RM45 million for rural-based entrepreneurs' development, specifically on agro-based and tourism-based small enterprises (Ninth Malaysia Plan, 2010). One of the initiatives taken by the MRRD to boost rural income is to facilitate the growth of small enterprises under the One District One Product (ODOP) program. ODOP aims to encourage rural entrepreneurs to produce at least one product from their district/village for commercialisation using available natural resources, local craftsmanship and creativity (Kader, Mohamad & Ibrahim, 2009).

Besides the government initiatives, there are other entrepreneur development organisations (EDOs) supporting the government agencies in facilitating entrepreneurs in their business start-up, for example funding and financial assistance from government-linked agencies like Amanah Ikhtiar Malaysia (AIM) and TEKUN Nasional that provide micro-credit facilities, subsidised equipment/premises, technical incentives (incubator schemes), especially for the hard-core rural poor (Chan, 2005). Other supporting institutions include development financial institutions like Perbadanan Usahawan Nasional Berhad (PUNB), SME Bank and AgroBank. These provide credit facilities to entrepreneurs for their initial start-up.

It is clear that the Malaysian government is very concerned to encourage rural micro enterprises development as a source of economic growth. In fact, for rural Sabah, which is populated mostly by poor households, under the Sabah Tourism

Master Plan, the government has initiated a long-term socio-economic blueprint to accelerate economic growth and elevate income levels in the state (Sabah Development Corridor, 2008). One of the initiatives under the Sabah Tourism Plan is to encourage rural participation in community-based tourism. This program is especially targeted to poor households in rural areas intending to participate in the village-stay program, small-scale food production and handicrafts production under the One District One Product (ODOP) program supported by the taskforces, i.e. Ministry of Tourism, Culture and Environment, Ministry of Rural Development of Sabah, Ministry of Industrial Development and Malaysian Handicraft Development Corporation (MHDC). These taskforces provide support in the form of advisory services on production, quality control, packaging and product designs, market opportunities and start-up grants, as well as funds for business upgrading for communities interested in ODOP production full-time. Figure 2.4 shows the ODOP villages in Sabah with their specialised product/industry.

Figure 2.4: *One District One Product Villages in Sabah*



Source: Sabah Development Corridor (2008)

The Malaysian Handicraft Development Corporation (MHDC), under its Craft Entrepreneur Development Program has introduced the Craft Incubator Scheme aimed to develop skills in handicraft production and instil participants to engage in commercialised production on a full-time basis once they completed the training.

The craft incubator scheme is targeted at the young producers who will be nurtured to be resilient and successful entrepreneurs within the duration of three years. After three years, trainees are required to leave the scheme and operate their business independently. The MHDC always encourages and supports the ex-incubator and other craft entrepreneurs who are still working with the traditional production or part-time from home to expand their business to a greater level i.e. small enterprise with more than five employees. The project aimed to encourage producers to produce quality products through modern production and manage their company effectively in order to ensure continuous supply of handicraft products for domestic and export markets. Nevertheless, it is found that very few young producers would be very keen to continue their handicraft activity as commercial production. According to Ismail (2006), the former Director of the MHDC Kuala Lumpur Branch, the younger generation would not spend hours to produce something which is time consuming and labour intensive but generates little income.

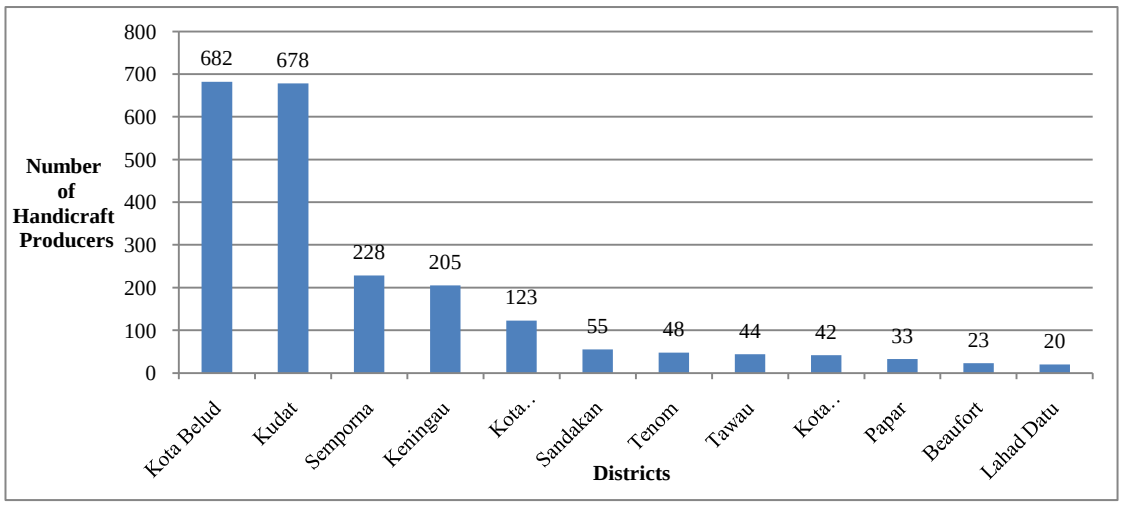
It is clear that in Malaysia, coordinated efforts have been undertaken by government agencies and several supporting agencies to create a better economic environment in the rural areas, including anti-poverty programs and small and medium enterprises (SMEs) development programs. The importance placed upon entrepreneurship as a plausible engine for economic growth can be seen through the variety of supporting mechanisms and policies that exist for communities and entrepreneurs in terms of funding schemes, physical infrastructure, advisory services and training. Acknowledging all of these initiatives, especially the development program for small handicraft enterprises, it is of interest for this study to review the structure of the handicraft industry in Malaysia, particularly in Sabah. The next section provides an overview of the handicraft sector in Sabah.

2.4 Overview of Handicraft Sector in Sabah

This section provides an overview of the handicraft sector in Sabah, in terms of the total number of handicraft producers and their demographic profiles. The Census of Sabah Handicraft Production in 2008, produced by the Malaysian Handicraft Development Corporation, is the main source of data presented in this section. This census is conducted once every four years which involved all handicraft producers in

Malaysia, including Sabah. For Sabah region, the data are collected by research officers and research assistants of the Malaysian Handicraft Development Corporation based in all districts of Sabah, which are then compiled and analysed by an appointed research consultant, i.e. Azlan and Associates based in Kuala Lumpur. It is found that the result of the handicraft producer census for Sabah shows similar patterns as the census for the whole Malaysia, therefore, it can be said that the MHDC Census are reliable sources of information for this study. Based on the Census data, there are 2,182 handicraft producers in Sabah. Figure 2.5 shows which district the handicraft producers are located in.

Figure 2.5: *The Population of Handicraft Producers in Sabah, 2008*



Source of data: Malaysian Handicraft Development Corporation, Sabah (2008)

Kota Belud district contains the largest amount of handicraft producers in Sabah (682), followed by Kudat (678 producers), Semporna (228 producers), Keningau (205 producers) and Kota Marudu (123 producers). With regards to the demographic profile of handicraft producers in Sabah, Table 2.8 presents the percentage of handicraft producers by gender, age and ethnic group.

Table 2.8: *Gender, Age and Ethnic Group Profile of Handicraft Producers in Sabah (n= 2,182)*

Demographic characteristics		n	%
Gender	Female	1,829	83.8
	Male	353	16.2
Age	29 and below	469	21.5
	30 to 49	1,022	46.8
	50 to 69	612	28.1
	70 and above	79	3.6
Ethnic group	Sabah indigenous	2,052	94
	Malay	122	5.6
	Chinese	6	0.3
	Indian	2	0.1

Source of data: Malaysian Handicraft Development Corporation, Sabah (2008)

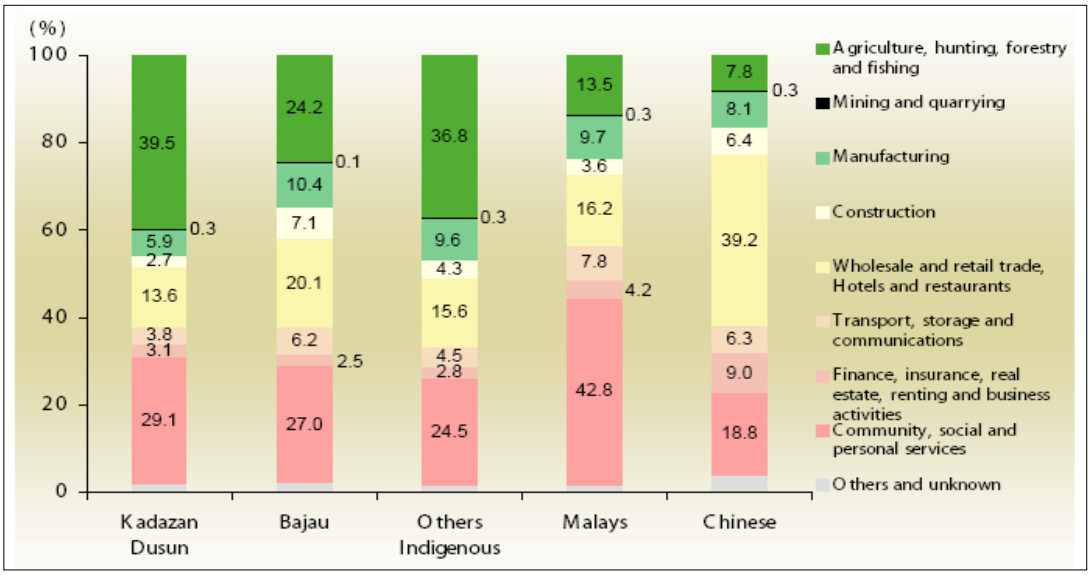
In terms of gender, it can be seen that handicraft producers are predominantly female. Traditionally, handicraft-making in Sabah is mostly done by women especially housewives, for daily use or cultural purposes, while men are engaged in farming. The level of male and female involvement in handicraft production does vary according to the type of products produced. For example, products like woven mats, baskets, textiles and clothes are traditionally almost always made by women, but men are actively involved in semi-mechanised production of products like machetes *(parang)*, brass-gongs and wood carvings.

Nearly half (46.8 percent) of handicraft producers in Sabah are between the ages of 30 and 49, and over a quarter are in the age group 50 to 69 (28 percent). Therefore, the census shows that most handicraft producers in Sabah are quite mature. Being middle aged, many of these handicraft producers have dependents. Therefore, it is possible that making handicrafts for sale is regarded by the producers as a useful way to gain additional income for their families.

In terms of ethnicity, the majority (94 percent) of handicraft producers in Sabah are Sabah indigenous people (mainly Kadazan and Bajau people), followed by Malay (5.6 percent) and a tiny proportion of Chinese and Indian people. Figure 2.6 shows the population distribution of Sabah people in various industries by ethnic groups. It can be seen that many of Sabah's natives are actively engaged in agriculture, hunting and forestry compared to Malays, Chinese and Indian people. It suggests that for

many native households, handicraft production is likely to take place alongside other activities like these.

Figure 2.6: *Employed Population Distribution by Industry Category and by Ethnic Group, Sabah*



Source: Sabah's Human Development Progress and Challenges Report (2008)

In terms of types of product made, Sabah handicrafts can be segmented into four major categories, namely textiles (*batik* and weaving, embroidery), forestry (woodcraft, bamboo and rattan), earthen-based (ceramic, pottery) and metal and mineral (silver and brass). Table 2.9 shows the percentage of handicraft producers based in each product category. As can be seen, categories with the most producers are forest-based and textile-based.

Table 2.9: *Handicraft Producers by Product Category, Sabah (n=2,182)*

Product Category	n	%
Forest-based	1,402	64.3
Textile-based	353	16.2
Metal and mineral based	108	4.9
Earthen based	35	1.6
Miscellaneous	284	13

Source of data: Malaysian Handicraft Development Corporation, Sabah (2008)

The types of handicraft produced by Sabah people are influenced by their cultural activity and the availability of raw materials in their areas. For example, the Bajau and Irranun people in Kota Belud are renowned for their traditional textiles (*dastar* and *batik*) and machetes (*parang*), whilst the Rungus people in Kudat are known for brass gongs, beads and music instruments called *kulintangan*. The Bajau people of Semporna produce pearls and miniature wooden boats called *lepa-lepa*, whilst the Kadazan-Dusun people in Keningau and Kota Marudu produce rattan and bamboo basketry. Figure 2.7 shows the types of handicraft products produced in Sabah by the different ethnic groups.

Within the handicraft sector, it is useful to mention a special type of producer called master crafts persons or craft artisans *(karyawan kraf).* These producers have been honoured by the government for their high quality craft works. They are traditional artisans, highly skilled, who produce their products in a traditional and time-intensive way, therefore their products are highly priced. In Sabah region, there are seven master crafts persons, all of them textile weavers in Kota Belud. They are female, aged 50 and over. They mainly produce items to order for customers like museums and government agencies. Master crafts persons are also sometimes hired by the Malaysian Handicraft Development Corporation (MHDC) as trainers in the incubator scheme to teach young villagers how to make handicrafts.

Figure 2.7: *Types of Handicraft Produced in Sabah.*

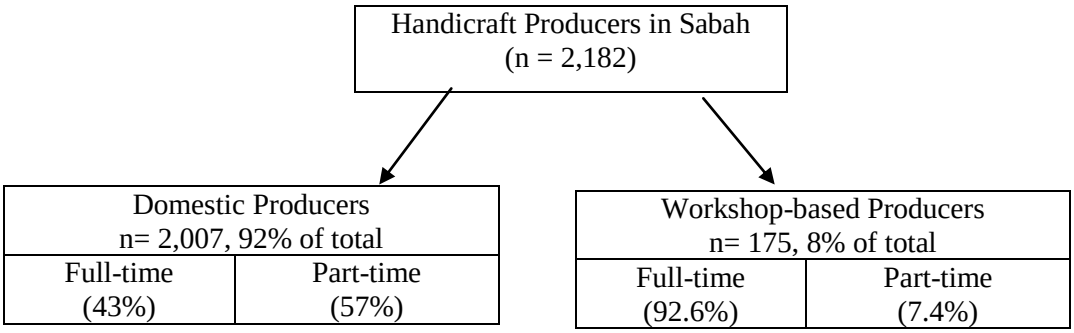
Divisions and districts	Main ethnic group	Types of handicraft produced
West Coast (Kota Belud, Papar, Kota Kinabalu)	Bajau, Irranun, Malay	Forest-based, textile and metal-based (examples: parang-making and traditional textile weaving).  
Kudat (Kudat, Kota Marudu)	Rungus, Malay	Forest-based, metal-based and bead-making.  
Tawau (Semporna, Tawau, Lahad Datu)	Bajau, Malay	Forest-based (e.g. miniature boat-making), pearls  
Interior (Keningau, Beaufort, Tenom)	Murut, Malay	Forest-based (example: bamboo musical instrument and rattan basketry)  
Sandakan (Sandakan)	Suluk, Chinese	Forest-based and earthen-based (example: woven baskets, pottery, ceramic)  

2.5 Profile of Handicraft Producers by Premises and Status

2.5.1 Introduction

The previous section showed that handicraft producers in Sabah are mainly female, mature, and belong to one of the indigenous ethnic groups of Sabah. They make different products made from various materials, depending on the area and ethnic group they belong to. This section now presents an overview of handicraft producers' profile in terms of their premises (i.e. whether home-based or not) and status (i.e. whether full-time or part-time). These two characteristics are of central interest, because the Malaysian government aims to encourage full-time, workshop based production within its economic development programs for rural areas, and research is needed to understand how this could happen. In terms of premises, the census from the Malaysian Handicraft Development Corporation (2008) shows that the vast majority (92 percent) of handicraft producers in Sabah are engaged in home-based production. Only 8 percent of producers make their handicrafts in workshops. So, it is clear that handicraft production in Sabah is overwhelmingly a domestic activity. In terms of status, the census shows that the proportion of time devoted to handicraft production varies according to type of premises. Of all the domestic producers in Sabah, more than half (57 percent) engage in handicraft production as a part-time activity. In contrast, the vast majority (92.6 percent) of workshop-based producers are full-time. Therefore, workshop-based production is more likely to be undertaken on a full-time basis compared with domestic production. Figure 2.8 summaries the premises and status profile of handicraft producers in Sabah, according to the census data.

Figure 2.8: *Premises and Status of Handicraft Producers in Sabah (n=2,182)*



Source: Malaysian Handicraft Development Corporation, Sabah (2008)

Amongst both domestic and workshop producers, the census shows there are some who have received government supports and incentives in term of technical training, financial assistance, or in some cases, premises and equipment provision. Table 2.10 shows the number and percentage of handicraft producers who formerly had training under the incubator scheme organized by Malaysian Handicraft Development Corporation (MHDC).

Table 2.10: *Handicraft Producers who Have Received Government Assistance through MHDC Incubator Scheme (n=76)*

Government-assisted Producers	Domestic Production (n=70)		Workshop Production (n=6)	
Proportion of time devote to handicraft production	Full-time	Part-time	Full-time	Part-time
n	55	15	6	0
%	78.5	21.5	100	0

Source of data: Malaysian Handicraft Development Corporation, Sabah (2008)

Table 2.10 shows that 70 out of 76 producers who received training in the MHDC incubator are domestic producers, with more than three quarters (78.5 percent) engaged in full-time production. It is interesting that these former trainees are still engaged in home-based production, rather than workshop-based, as the aim of the government training and assistance is to encourage more workshop-based production. Having presented an overview of the profiles of handicraft production in Sabah, in the following section, the characteristics of domestic and workshop-based handicraft producers are discussed in more detail. The discussion is based on information gathered from the MHDC census supplemented by insights from the key informant interviews.

2.5.2 Profile of Domestic Handicraft Producers

As the MHDC census showed, domestic handicraft producers form the vast majority of all handicraft producers in Sabah, and over half of them are engaged in part-time handicraft production, a high proportion compared to workshop producers. Key informant information revealed that full-time producers treat handicraft-making as their primary income, and produce their products continuously. Conversely, part-time producers treat their handicraft-making as additional to their main source of income, so, for example, they will produce and sell handicrafts during the off-farm

period or during their free time. Figure 2.9 shows examples of domestic handicraft producers making handicrafts at home, while Table 2.11 presents the demographic and business profile of domestic producers, according the MHDC census data.

Figure 2.9: *Examples of Domestic Handicraft Producers*

Pictures above show example of part-time domestic production: A Rungus woman in Kudat, Sabah is making a traditional necklace (*pinakol)* from beads.

Pictures above show examples of full-time domestic production: Women make baskets with fellow villagers at home.

Table 2.11: *Profile of Domestic Handicraft Producers in Sabah (n=2,007)*

		Full-time n= 858 (43%)		**Part time n=1,149 (57%)**	
		n	**%**	**n**	**%**
Gender	Female	698	81.4	998	86.9
	Male	160	18.6	151	13.1
Age	≤29	225	26	217	19
	30 - 49	360	42	541	47
	50 - 69	241	28	344	30
	70 +	32	4	47	4
Ethnic group	Sabah indigenous	785	91.5	1,102	95.9
	Malay	70	8.2	46	4
	Chinese	1	0.1	1	0.1
	Indian	2	0.2	0	0
Ownership type	Sole proprietorship	858	100	1,149	100
	Partnership	0	0	0	0
Full-time employees	0	596	69.5	1,011	88
	1 - 5	262	30.5	138	12
	6 - 10	0	0	0	0
Capital start-up (RM)	<100	596	69.5	1,087	94.6
	100 - 299	172	20	45	3.9
	300 - 499	83	9.7	16	1.4
	500 +	7	0.8	1	0.1
Funding sources	Self-financing only	799	93	1,141	99.3
	Government only	57	6.6	8	0.7
	Self and government equal	2	0.4	0	0
Average sales (RM)	<5,000	426	50	945	82.2
	5,000 – 14,999	317	37	191	16.6
	15,000 – 24,999	56	6.5	7	0.6
	25,000 – 34,999	48	5.6	5	0.4
	35,000 +	11	0.9	1	0.2
Distribution channels	Special orders only	61	7.1	146	12.7
	Special orders and direct to customers	666	77.6	578	50.3
	Via wholesalers and retailers	86	10	175	15.2
	Various channels	12	1.4	31	2.7
	For personal use	33	3.9	219	19
Received formal training	Yes	55	6.4	15	1.3
	No	803	93.6	1,134	98.7

Source of data: Malaysian Handicraft Development Corporation, Sabah (2008)

Table 2.11 shows that women comprise the vast majority of domestic handicraft producers in Sabah, both full-time (81.4 percent) and part-time (86.9 percent). There are relatively small numbers of male producers in both full-time and part-time

domestic production. In term of the distribution of age, the data reveals that close to half of both full-time and part-time domestic producers fall in the age group of 30 to 49, and over a quarter fall in the 50 to 69 age group. Therefore, domestic producers are generally quite mature. In terms of ethnicity, the vast majority of domestic producers are Sabah indigenous people, followed by those of Malay origin and a tiny proportion of Chinese and Indian people.

Regarding the business characteristics for domestic handicraft production, all of the producers are sole proprietors, which means they started and now handle their businesses solely on their own, and are responsible for all of their business activities. The majority of domestic producers, either full-time (69 percent) or part-time (88 percent), do not hire any employees at all, with 30.5 percent of full-time producers and 12 percent of part-time producers hiring 1 to 5 employees to help them in their production. In domestic production, a key informant revealed it is customary for producers to instead ask for help from their fellow villagers when they have to produce large units of products. They will pay their helpers based on the unit of product they make or on the length of time they spend on making the handicrafts (Director of Malaysian Handicraft Development Corporation, pers.com).

Regarding initial capital, the majority of both full-time and part-time domestic producers used RM 100 or less, while less than 1 percent of producers started their business with more than RM 500. This shows that domestic handicraft production is very often started with small initial capital, in fact very often personal savings. As regards the average income received by domestic producers, the vast majority of part-time producers have a yearly income in the lowest category of RM 5,000 or less, and half of full-time producers fall in the same category. In terms of economic situation, these producers are considered poor as their income levels fall under the 'bottom 40 percent' income group, in which household income less than RM 12,000 per year is regarded as poor (Population and Housing Census of Malaysia, 2010). At the same time, a small proportion of both full-time and part-time domestic producers achieve much higher incomes of more than RM 25,000 per year. They fall under the 'middle 40 percent' group which can be considered as quite high income (Population and Housing Census of Malaysia, 2010). It is not understood why some producers

are able to achieve such high incomes from their production, hence this is an area for further research.

In terms of distribution, Table 2.11 shows that most full-time producers (77.6 percent) and half of part-time producers (50.3 percent) sell their products based on a combination of special orders and selling directly to customers. Key informants revealed that full-time producers, who purposely make handicrafts as their main income activity, often produce handicrafts to order by customers, according to their preferred quantity, motifs and time. Customers then usually come to a producer's house to collect the products. Sometimes, producers send the ordered products to a buyer's shop. Otherwise, direct sales to customers normally involve selling products in a weekly market or *tamu*, or to tourists who come to visit producers' villages. Figure 2.10 shows an example of domestic producers selling their handicrafts in weekly market *(tamu).* A small proportion of both full-time and part-time producers sell their products via wholesalers or retailers. A very small number of producers make use of more than one channel, for example besides selling upon order, some of them also sell through exhibitions or events organised by the MHDC or other agencies. More part-time producers than full-time producers make handicrafts not for sale but for personal use.

Figure 2.10: *Example of weekly market (tamu) where handicrafts made by domestic producers are sold in Sabah.*

2.5.3 Profile of Workshop-based Handicraft Producers

Workshop-based handicraft producers are producers with a legal handicraft workshop, registered with the Registrar of Business. Based on the census by the MHDC (2008), there are 175 workshop-based producers in Sabah, of which the vast majority (92.6 percent) are full-time, while the rest are part-time. Table 2.12 shows

the profile of workshop-based handicraft producers in Sabah and Figure 2.11 shows an example of workshop premises.

Table 2.12: *Profile of Workshop-based Handicraft Producers in Sabah (n=175)*

		Full-time n= 162 (92.6%)		Part time n=13 (7.4%)	
		n	%	n	%
Gender	Female	123	76	10	77
	Male	39	24	3	23
Age	≤ 29	24	14.8	3	23
	30 - 49	113	69.8	8	62
	50 - 69	25	15.4	2	15
Ethnic group	Sabah indigenous	153	94.4	12	92.3
	Malay	5	3.1	1	7.7
	Chinese	4	2.5	0	0
	Indian	0	0	0	0
Ownership type	Sole proprietorship	158	97.5	13	100
	Partnership	4	2.5		
Full-time employees	0	74	45.7	8	61.5
	1 - 5	83	51.2	5	38.5
	6 - 10	5	3.1	0	0
Capital start-up (RM)	<100	92	56.8	11	84.6
	100 - 299	33	20.4	1	7.7
	300 - 499	29	17.9	1	7.7
	500 +	8	4.9	0	0
Funding sources	Self-financing only	157	96.9	13	100
	Government only	1	0.7	0	0
	Self and government equal	2	1.2	0	0
	Bank	2	1.2	0	0
Average sales (RM)	<5,000	38	23.5	6	46.2
	5,000 – 14,999	60	37	4	30.8
	15,000 – 24,999	23	14.2	2	15.4
	25,000 – 34,999	30	18.5	0	0
	35,000 +	11	6.8	1	7.6
Distribution channels	Special orders only	7	4.35	1	7.8
	Special orders and direct to customers	133	82	9	69.2
	Via wholesalers and retailers	15	9.3	3	23
	Various channels	7	4.35	0	0
	For personal use	0	0	0	0
Received formal training	Yes	6	3.7	0	0
	No	156	96.3	13	100

Source of data: Malaysian Handicraft Development Corporation, Sabah (2008)

Figure 2.11: *Examples of Workshop-based Handicraft Production*

Table 2.12 shows that for both full-time and part-time workshop production, over three quarters of producers are female. Although women can face greater difficulties to set up a workshop business compared to men, especially in obtaining capital (Nordin, Hamid and Chong, 2011), these data show that female handicraft producers in Sabah do set up formal and legal businesses. In terms of age, most workshop producers, both full-time and part-time, are aged 30 to 49 years, while the rest are equal groups of aged 29 and below and 50 to 69. The vast majority are of Sabah indigenous ethnic origin, followed by a very small proportion of Malay and Chinese people.

In terms of business ownership, the vast majority of full-time workshop producers (97.5 percent), and all of the part-time producers are sole-proprietors. In terms of employment, it is interesting to note that 61.5 percent of part-time producers, and 45.7 percent of full-time, do not hire any employees. Workshop production does not necessarily involve employment of staff therefore, and even

when it does, the numbers are almost always five or less. To start up their business, 43.2% of full-time producers used more than RM 100 as initial capital. Conversely, the great majority (84.6 percent) of part-time producers started their business with less than RM 100. The initial funding source used by both full-time and part-time producers was almost always self-financing. This is a surprising result, it would be expected that a larger proportion of workshop producers would have received government assistance to start their businesses, given the support programs available. In terms of annual sales, the incomes received by full-time and part-time workshop producers are rather different. Whereas close to half of part-time producers earned less than RM 5,000, and close to one third earned RM 5,000 to RM 14,999, only a quarter of full-time producers received less than RM 5,000. Also, a much higher proportion of full-time producers received incomes in excess of RM 25,000 compared with part-time producers. It is perhaps not surprising that full-time producers received higher incomes compared to the part-time producers. Full-time producers devote more time to their handicraft businesses, while the part-time producers treat their handicraft production as secondary to other jobs. The distribution channel used by workshop producers is mainly a combination of selling directly to customers and taking special orders. Producers normally sell their products on display in their premises, then use special orders for large quantities of products. Some producers participate in local handicraft exhibitions or international trade fairs, either organized by the state government or private agencies. Finally, in terms of business training, no part-time producers had received formal business training, and only six (3.7 percent) full-time producers had. Again, this is a surprisingly low proportion, given Malaysian government policy and availability of support programs. All the producers who had received formal training also received subsidies or incentives from the government agencies especially from the MHDC and Ministry of Rural Regional Development under the One District One Product (ODOP) program, mainly in the form of equipment or funding for expansion of their workshop. Hence, the recipients of business training and funding from government sources, as recorded in the census, are most likely to be the same producers. The next section describes these producers further.

2.5.4 Profile of Government Assisted Workshop Producers

It is found from the census, there are two types of registered handicraft workshops in Sabah, privately-owned and government-assisted. Privately-owned handicraft workshops are managed by producers who set up the business on their own, without government assistance. By contrast, the government-assisted workshop is owned and managed by producers with some degree of assistance from government agencies, in the form of technical training and business infrastructure. The government assisted producers are those who have been trained by the government agency under the handicraft entrepreneur development program, or incubator scheme, and have operated their business independently after finished their training, with support from a government agency during start-up. For example, the Malaysian Handicraft Development Corporation (MHDC) provides the Up-grading and Craft Entrepreneur grant to start a business. This supports purchase of raw materials, credit sources, rent of small equipment or machines, expansion of the workshop, or delivery of other technical support like marketing and accounting assistance during the initial stage of operation. Of the six workshop producers in Sabah that are government-assisted, all are full-time, of equal proportions of male and female and the majority are aged below 49 years. In terms of financing, these producers had start-up capital of not more than RM 300, and somewhat surprisingly, they claim on the census to be self-financing. It appears that government assisted producers use their personal savings for their initial capital, especially for raw materials and tools for the production. However, they use a government grant or subsidies for the building of their premises. Figure 2.12 shows examples of government-assisted workshop producers.

Figure 2.12: *Examples of Government Assisted Workshop*

2.5.5 Summary

The MHDC census data presented in the above sections show that handicraft producers in Sabah are involved either in domestic production or workshop-based production, and there are some profile differences between these two types. In terms of status, over half of domestic producers are part-time, whereas almost all workshop producers are full-time. Domestic producers are also more likely to fall into older age categories (50 years and above). In terms of business operation and performance, domestic producers hire fewer employees and rely on lower start-up capital. They also tend to have sales incomes in the lowest categories (RM 14,999 and less) compared with workshop producers, although the differences in income levels are perhaps not as big as might be expected. Table 2.13 summarises the comparison between domestic and workshop producers.

Table 2.13 *Comparison of Profiles of Domestic and Workshop-based Producers in Sabah*

Profile		Domestic Production (n=2,007, 92%)		Workshop-based Production (n=175, 8%)	
		n	%	n	%
Status	Full-time	858	43	162	93
	Part-time	1,149	57	13	7
Gender	Female	1,696	85	133	76
	Male	311	15	42	24
Age	≤ 29	442	22	27	15
	30 – 49	901	45	121	69
	50 – 69	585	29	27	15
	70+	79	4	0	0
Average Annual Sales	< RM 5,000	1,374	68	44	25
	RM 5,000 – 14,999	508	25	64	37
	RM 15,000 – 24,999	63	31	23	13
	RM 25,000 – 34,999	53	3	30	17
	RM 35,000+	12	1	12	7
Received formal training	Yes	70	4	6	3
	No	1,937	96	169	97
Distribution Channel	Upon orders only	207	10	44	25
	Direct to customer	1,244	62	64	37
	Via wholesalers retailers	261	13	25	14
	Various channels	43	2	30	17
	For personal use	252	13	12	7
No. of employees	0	1,607	80	82	47
	1 – 5	400	20	88	50
	6 – 10	0	0	5	3
Business Ownership	Sole proprietorship	2,007	100	171	98
	Partnership	0	0	4	2

Source of data: Malaysian Handicraft Development Corporation Sabah branch (2008)

2.6 Handicraft Production in Sabah: Emerging Issues for Research

2.6.1 Introduction

In Malaysia, various rural development programs have been established by the government in order to encourage and develop handicraft production. The government believes that handicraft production has potential to contribute to poverty reduction and economic development in Sabah. However, the data presented in this chapter, based on the Malaysian Handicraft Development Corporation (MHDC) census, shows that the vast majority (92 percent) of handicraft production in Sabah is

undertaken domestically, and over half is done on a part-time basis. Very few producers have set up workshops, despite government assistance and incentives to encourage producers to make the transition from domestic to workshop production. This leads to the question, "what difficulties do producers perceive or experience with workshop-based production?". Or conversely, "what advantages do producers perceive or experience with domestic production?". The advantages or disadvantages that handicraft producers perceive and experience in both types of production may be important in explaining why so few set up workshops. This is the first issue for research. A second issue relates to the income levels of handicraft producers. One reason why the Malaysian government favours workshop-based production is that it can be assumed more profitable, because it is more formalised. Data from the MHDC census show that, on average, workshop producers do have higher income levels than domestic producers. However, the data also show that almost a quarter of full-time workshop producers, and close to half of part-time ones, earn incomes in the lowest category (RM 5,000), whilst a small proportion of domestic producers manages to earn incomes of RM 15,000 and above. These facts suggest a more complicated relationship between handicraft producer premises and income levels, and that a transition from domestic to workshop-based production may not necessarily mean higher incomes. The next two sections discuss these research issues further.

2.6.2 Perceptions and Experiences of Handicraft Producers: Domestic vs. Workshop Production

The first emergent issue involves understanding more about how handicraft producers themselves perceive and experience the advantages and disadvantages of producing handicraft in a workshop or at home. There are many possible reasons why a domestic producer may see disadvantages in making the transition to workshop production. For example, domestic producers might see setting up a workshop as requiring new additional skills like management, accounting and marketing which mean they would have to go for training. Alternatively, to engage in workshop-based production, domestic producers might be deterred by the need for a detailed plan for their business, to acquire financial assistance, a trading license, and additional facilities like land, buildings and other costs. Some handicraft producers

may think that by continually producing their handicrafts informally at home, they do not require heavy capital or expensive machines. Domestic production may also be seen as less disruptive to daily work or family commitments, as well as involving lower costs due to lower overheads, lower business risk, and ease of management in daily activities. On the other hand, for those producers who have set up workshops, there is a need to understand more about how they see the advantages and disadvantages of both types of production, and how they overcome the barriers that deter most domestic producers from making the transition.

2.6.3 Income Levels of Domestic and Workshop-based Producers

The second research issue relates to the income levels of domestic and workshop-based producers. The Malaysian government may assume that higher income enterprises are more likely to be based in formal dedicated premises. Enterprises like these may have economies of scale in production, which lower costs. Also, they may also have better accounting and marketing activities, and better business planning. All of these can generate higher incomes. However, while workshop production may give the opportunity for higher income advantages, it depends on the ability and skills of the producer to realise them. If a producer does not have the skills in management, or the motivation to acquire them, mistakes can be made which will affect performance. In addition, workshop production might require higher start up and operating costs compared with domestic production. These are just some of the possible reasons to explain why some workshop producers have low incomes relative to domestic producers. Research is needed to understand fully the relationship between production premises and income levels, and to identify which factors are most important for handicraft producers in Sabah.

2.7 Summary

This chapter has presented information on the state and nature of handicraft production in Sabah, Malaysia. Starting with an introduction of the region of Sabah, it has shown that Sabah is currently the poorest of Malaysia's states despite its vast wealth of natural resources, with half of the population living in rural areas. The tourism sector is an important driver for Sabah's economy, with small-scale handicraft production and village-stays as key contributors to income levels. The

Malaysian government aims to encourage handicraft production in Sabah for economic development; specific measures are the One District One Product (ODOP) program, incubator scheme, funding and incentives for start-ups, and other advisory services. The census of the Malaysian Handicraft Development Corporation (MHDC) shows that overall, the vast majority of handicraft producers in Sabah are domestic, and over half of them work on a part-time basis. Workshop based producers are overwhelmingly full-time status, a bit younger in profile and have more employees than domestic producers. On average, they also have higher income levels than domestic producers, although the income differences between the two are not completely straightforward. Research is needed to understand better the perceptions and experiences of handicraft producers regarding the type of premises and status that they choose for production, and also to understand more fully the relationship between type of premises, status and income levels of handicraft producers. To investigate these issues further, the next chapter presents a review of the literature on small enterprise development and growth, and factors influencing small enterprise performance, focusing on how, in theory, growth and performance are influenced in handicraft enterprises.

Chapter 3 Entrepreneurship and Small Enterprise

3.1 Introduction

The previous chapter has provided background information on the current nature of small-scale handicraft production in Sabah, Malaysia. It has shown that the vast majority of handicraft production in Sabah is undertaken domestically, mainly on a part-time basis, and very few producers have set up workshops. This is in contrast to the strategy of the Malaysian government, which aims to increase the level of full-time, workshop production amongst handicraft producers. This type of production is seen to have many advantages, but what is the theoretical basis for it? How, in theory, do different types of small enterprise contribute to local, rural, economies? How do they develop and grow? How can their performance levels be measured and predicted? The aim of this chapter is to review theoretical and empirical studies in the small firms and entrepreneurship literatures to address these questions. More precisely, the objectives of this chapter are:

i. To explain how, in theory, entrepreneurs contribute to economic growth, especially in rural areas
ii. To describe the main characteristics of small enterprises and main models of how they grow, perform and make the transition to full-time status and/or non-domestic premises
iii. To analyse in detail the factors that influence growth/performance of an enterprise
iv. To consider the specific characteristics of handicraft and related types of enterprise, and their implications for performance

The chapter starts by presenting a brief background to entrepreneurship including its definition and role in the economy, especially in rural areas (Section 3.2). Next, the chapter presents the main theories of how enterprises develop and grow (Section 3.3). Following this, the chapter discusses the literature on factors influencing small enterprise performance, including the personal factors and contextual factors (Section 3.4). Section 3.5 discusses the characteristics and performance factors of handicraft producers, based on existing studies of handicraft-

related sectors in rural areas in developing countries. Then, the chapter then sets out the implications from the literature reviewed in this chapter for the current study (Section 3.6) and finally Section 3.7 summarises the chapter.

3.2 Entrepreneurship and Rural Economies

This section discusses the meaning of entrepreneurship based on different conceptualisations through history, and explains the role of entrepreneurship in the economy, especially in rural areas.

3.2.1 Defining Entrepreneurship

In general, there is no uniform definition for entrepreneurship. However, an understanding of the broad meaning of entrepreneurship can be gained by taking an historical perspective. The development of theories on entrepreneurship spans a long period, with different emphases. Starting from Cantillon's time in the 17th century (Ebner, 2005), entrepreneurs were recognised as one set of economic agents who engaged in activities where risks are uncertain. In Weber's period in the 18th century, entrepreneurship was recognised as the society of free labourers, self-reliant and parsimonious. Then, in the 19th century, as the political economy evolved in the UK, entrepreneurs were portrayed as business owners or managers. In the early 20th century, under the work of many neo-classical economists, interest in entrepreneurship waned due to greater emphasis on equilibrium and capitalism. Then, the concept of entrepreneurship was appreciated by Schumpeter's innovation concept, where entrepreneurship was linked to novelty and change. Towards the end of the 20th century, due to unemployment and economic contraction, alternative views to the mainstream neo-classical paradigm were recognised. Under the work of Kirzner (in Brouwer, 2002), profit opportunities were taken into account. These tended to equate entrepreneurs with profit maximisation, innovation and economic expansion solely based on combined resources of labour and capital (Brouwer, 2002).

Throughout the early development of entrepreneurship theory during the period of traditional neo-classical economy, entrepreneurship was conceptualised as a fragile economic activity, under the great influence of external effects, like political influences, market uncertainty and availability of resources. In the decade before the

21st century, a new economic growth theory developed as an alternative to the old neo-classical exogenous economic model. The new theory suggested that a dynamic entrepreneurship could be gained through endogenous strategies (Wennekers & Thurik, 1999). Endogenous strategies explain economic growth on the basis of Schumpeter's 'innovation and creative destruction' model, i.e. investment in invention of new techniques in production enlarges entrepreneurial ability, which is the most valuable human capital for long term growth of enterprises.

In sum, inspired by different conceptualisations from the period of early economic models until the modern era, entrepreneurship has encompassed a wide range of meanings. It can be said that entrepreneurship is an activity of commercialisation of new ideas (Schumpeter, 1934), by individuals who own and manage enterprises (Marshall, 1961), and who possess specific aptitudes (Drucker, 1985), like independence, risk-taking, innovation, creativity and opportunism, and whose behaviour and processes are also shaped by environment context, including social and financial institutions, government agencies, and education institutions, for continuous economic growth (Korunka, et al, 2003; Lee & Tsang, 2001; Frank, et al, 2007).

3.2.2 The Role of Entrepreneurship in the Economy

Entrepreneurship has been regarded by many scholars as the prime motivator of economic development (Schumpeter, 1934; Hornaday, 1990; Drucker, 1985). The role of entrepreneurship in stimulating economic growth has been acknowledged since the early history of economics (North & Smallbone, 1996; Wennekers & Thurik, 1999) Ebner, 2005). Pioneering views about the role of entrepreneurship in the economy primarily emphasised the 'personal qualities of the entrepreneur' (for example, the entrepreneur as risk-taker, decision maker, self-regulator, innovator) as vital attributes for economic development at the micro, i.e. firm level (Schumpeter, 1934; Marshall, 1961; Drucker, 1985). The function of entrepreneurs at a macro level in the economy is explained in the work of Schumpter's 'creative destruction', which describes the vital role of entrepreneurs as innovators who move industry forward. The approach contends that new inventions overtake existing inventions, and from time to time, this process also contributes to the enlargement of entrepreneurs'

abilities (human capital), thus contributing to better industry growth. Schumpeter (1934) asserted that the function of entrepreneurship in the economy involves contributing value to production via 'new combinations' of entrepreneurial activities, namely, (1)introduction of a new product, (2)introduction of a new processes of production, (3)opening of a new market, (4)invention of new raw materials, and (5)the reorganisation of any industry.

In modern, competitive economies, entrepreneurial spirit and intelligence are not the only resources needed to survive. External influences like support and initiatives from the government have also been viewed as contributing factors in strengthening the capacity of entrepreneurship in the economy, both at the firm level and national level (Sarder, et al, 1997; Yusuf, 1995; Wennekers & Thurik, 1999). The role of entrepreneurship in the economy, according to many previous studies, involves creating value not limited to personal wealth, but also to the whole economy. This can include adding value to production via creation of new things (Schumpeter, 1934), adding value to self via developing human capital (Bull & Willard, 1993) and adding value to the whole economy through job creation and poverty reduction (North & Smallborne, 1996; Wennekers & Thurik, 1999). In a nutshell, the favourable impact of entrepreneurship in the economy can be viewed at various levels of the economy, i.e. the individual level, the firm level and the national level.

3.2.3 Entrepreneurship in Rural Areas

The role of entrepreneurship in the economy is not limited to urban areas, but also applies to rural areas. Some social scientists have viewed the favourable impact of entrepreneurship in rural areas more in terms of poverty reduction via job creation (North & Smallbone, 1996), whereas in urban areas, it has been linked more to development of economies of scale and network learning effects (Nijkamp, 2003). Often, small firms in rural areas are labour-intensive in nature and dependent on local resources for production (Harper, 1991; Shields, 2005). Their rate of development is low compared to urban areas because they are exposed to a greater range of challenges due to the constrained environment (Kalantaridis & Bika, 2006; Kodithuwakku & Rosa, 2002). Capital and labour tend to be attracted to areas which are already developed, i.e. urban areas (Terluin, 2003), so rural areas remain disadvantaged. This poses a problem for already deprived areas: how can the

communities develop their local capacities and resources in spite of these disadvantages?

Two theories in the literature offer more understanding of these issues, namely (i) exogenous growth theory and (ii) endogenous growth theory. These theories are two alternative ways of explaining how economic growth happens in an area. Exogenous growth theory concentrates mainly on the contribution of labour and capital to the process of economic expansion. It proposes that external infusion of physical support and facilities including financial assistance and skills development could help small enterprise to achieve profit maximisation. When labour and capital act in this way, there is a risk of low retention of revenues and investments in less developed areas and as a result, the firms in those areas might not be able to expand in the long run (Wennekers & Thurik, 1999). Meanwhile, endogenous growth theory concentrates on the role of existing resources within areas. It proposes that economic growth happens as a result of local people being stimulated to develop enterprises based on local resources (Terluin, 2003). In recent years, governments responsible for less developed or rural areas have sometimes followed the endogenous growth approach, emphasising a facilitating strategy through investments in research and development, education, training and knowledge centres to help local people to create their own enterprises based on local natural resources and own culture heritage(Terluin, 2003; Nijkamp, 2003). This model is followed by the Malaysian government in Sabah through its One District One Product (ODOP) program, which aims to encourage local people to convert the available natural resources in their district/village, using local experts and their creativity, to produce resource-based and cultural-based products for commercialisation.

Nevertheless, it is acknowledged that the external supports and facilities from various institutions per se may not always promise successful entrepreneurial development (Nijkamp, 2003). In rural areas for instance, communities who have traditionally relied on local resources for their livelihoods would possibly be ambivalent about engaging in activities proposed by government agencies which are beyond their capacity, culture and environment. Government agencies can have specific goals and targets; however Harper (1991) contends that to be effective, endogenous approaches must be sensitive to the needs and goals of local people.

There is a need to understand the people and the context of the region to be developed, including the level of entrepreneurial capacity of the local people (North & Smallbone, 1996) and the cultures they hold (Davidsson, 1995b), as well as the resources the region has to develop strong enterprises (Harper, 1991).

3.3 Small Enterprise Characteristics, Growth and Performance

3.3.1 Definition and Characteristics of Small Enterprises

Generally, enterprises grow and evolve from small to larger size; therefore, it is acceptable to say that the natural home of the entrepreneurship is the small enterprise sector. In terms of definition, there is no uniformly agreed description of a small enterprise. The interpretations of small enterprise tend to vary between countries and are revised from time to time by organisations that support the development of small enterprises, based on particular criteria influenced by the economic development of a country. Nevertheless, existing typical definitions include quantitative categorizations, for instance, some countries benchmark small enterprises against certain volumes of sales and numbers of full-time employees (Hashim, 2007; Holmes & Zimmer, 1994) or shareholders' funds (Hashim, 2007). In other countries, small enterprises have been categorised based on qualitative characteristics like level of business activity and the area of operation (ESCAP, 1992), the range of performance and characteristics of the owners (Hosmer, et al, 1997), and the degree of ownership of the firm and the size of its market share (Stanworth & Curran, 1976).

In Malaysia, small enterprises are dominantly populated by micro-sized enterprises, with less than five workers, annual sales revenues of less than RM250,000, about three-quarter are sole proprietors, and they are mainly in the distributive service and agriculture sectors (Census of Establishments and Enterprises, 2005; Yusoff, et al, 2010). Table 3.1 summarises the approved definitions of small enterprises in the manufacturing sector in Malaysia by the National SME Development Council of Malaysia (2005). Generally, two common criteria have been widely used together in firm's classification as small enterprise or larger enterprise, i.e. number of employees and annual sales turnover. It is crucial to acknowledge that other than these two performance-related criteria, enterprises may also vary from each other in many ways, for instance the characteristics of individual

(Smith, et al, 1983) and the new venture process they go through (Schumpeter, 1934).

Table 3.1: *Definitions of SMEs in Manufacturing Sector in Malaysia*

Size	No. of employees	Annual sales turnover
Micro	Less than 5	Less than RM 250,000
Small	5 to 50	Between RM 250,000 and less than RM 10 million
Medium	51 to 150	RM 10 million to RM 25 million

Source: National SME Development Council, Central Bank of Malaysia (2005).

Many studies on the profile of the small business sector argue for a need to treat the sector as heterogeneous. Beyond the basic definition, small enterprises may have very different characteristics in terms of characteristics of the owners (Roberts & Robinson, 2010; Lee & Tsang, 2001; Baum & Locke, 2004), levels of operation, e.g. levels of resources and capabilities acquired into the business (Chan, 2005; Honig, 1998), and patterns of growth or levels of performance (Holmes & Zimmer, 1994; Chaganti & Chaganti, 1983). Walker and Brown (2004) contend that while larger enterprises measure business success or performance based on financial criteria, small enterprises measure their performance based on other alternatives, i.e. non-financial criteria, for example lifestyle, independence and other personal motives. Small enterprises survive in their business predominantly through interpersonal marketing, for example word-of-mouth promotion and selling direct to end users as well as through product differentiation rather than on price differentiation (Hall & Wahab, 2007; Bhagavatula, et al, 2010; Kaikkonen, 2006). In terms of location of operation, it is also acknowledged that small enterprises are populated mostly in rural or sub-urban areas, which well-known with its constraint environment (Kodithuwakku & Rossa, 2002; Berma, 2001), especially in terms of infrastructure, market opportunities, and supply of resources.

Although all types of enterprise face some forms of challenge throughout their operations, it is often argued that smaller firms face a greater range of challenges compared with larger firms. Sapienza (1991) and Hall & Wahab (2007) contend that increased size of an enterprise correlates positively with its survival rates, i.e. smaller firms encounter higher rates of discontinuance or failure compared with larger firms. Some of the challenges faced by small enterprises are directly related to their limited

resources, like lack of access to credit, skilled labour and raw materials (Berma, 2001; Chan, 2005) while others relate to problem of small firm owner-manager as a generalist (Abdullah, 2000; Hashim, 2007). Drucker (1974) mentioned due to its smaller size and limited resources, small enterprise need highly organised and resourceful owner-managers, even more than larger enterprises. It is argued that since small enterprises hire fewer employees, the owner-manager often is obliged to undertake a range of tasks, not all which are within their competence. As a consequence, the owner-manager becomes a generalist, who knows all aspects of management such as finance, personnel, marketing and production. Nevertheless, being a generalist may contribute to challenges to small enterprise in terms of effectiveness of the management; i.e. because the owner-manager is required to do many aspects of tasks, it is hard for each task or role to be carried out effectively, thus this results in a poorly managed enterprise.

3.3.2 Theory of Small Enterprise Growth

This section discusses how small enterprises develop and grow. As acknowledged by previous studies of the entrepreneurial process, creating an enterprise is not an event which occurs suddenly, but a process which may take many years to evolve (Churchill & Lewis, 1983; Low & McMillan, 1988). Logically, all types of firms go through different growth paths, with varying periods of stagnation or transition to another level. Early research in the field of entrepreneurship found that owners' decisions and various environmental factors may influence the direction of developmental processes of small firms, as well as their performance (Cooper, 1981; Naffziger, et al., 1994; Begley, Tan & Schoch, 2005; Yusoff, et al, 2010). Nevertheless, prior to understanding the factors associated to the development and growth of small enterprises, this section first presents the relevant theories of how enterprises develop from start-up onwards.

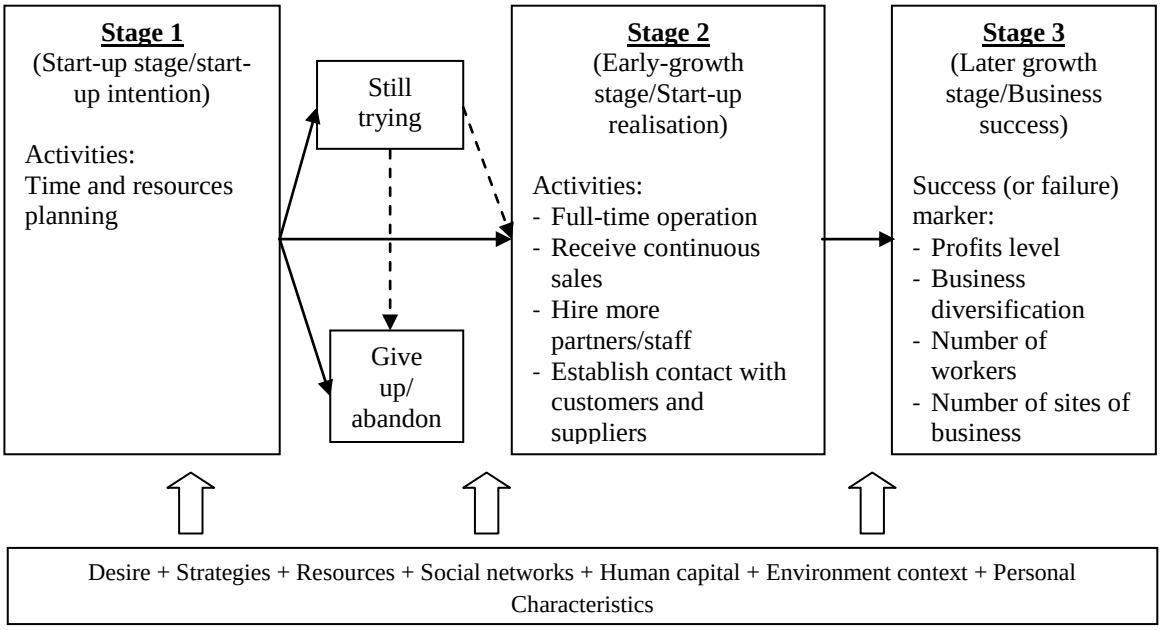
According to studies in enterprise development, the process of business transition can be divided into three stages, which starts with one or more persons having a desire to venture a business with planning of time and resources (start-up intention). The second stage (start-up realisation) involves continued active engagement in the business through strategies and resources utilisation. The third

stage involves extension to a greater growth stage (Kessler & Frank, 2009; Cooper; 1981; Reynolds & Miller, 1992). For example, Cooper (1981) considered all types of firms pass through three stages of development, i.e. from 'start-up stage', then move on to the 'early growth stage', and if successful may continue to the 'later-growth stage'. Cooper (1981) defines each stage in terms of the changes of role of owner-manager based on action and decision they exhibit in enterprise, i.e. their role change from 'doer' in the early stage of development to 'manager' in the later growth stage. Cooper's approach in examining firm development stage is parallel to Stanworth and Curran (1976) who suggested three types of entrepreneur's role or action may occur through a sequence of growth stages of a firm, 'artisan' identity, 'classical entrepreneur' and 'manager' identity. Another example of enterprise development stage in the literature is focused on personality traits in the course of 'start-up intention' through 'start-up realisation' and to 'business success' stage (Frank, et al, 2007). Frank, et al (2007) found the significance of personality traits is varying for different stages of enterprise development, i.e. the significance of personality traits among business founders decreases in the course of start-up intention through business success. Stanworth and Curran (1976) argue that not all small firms passing through the same sequence of growth stage that dominantly mentioned in 'stage model of growth', with one or more stages may be missed out or discontinued. Carter, et al (1996) suggest a more differentiated view of start-up event sequences, which leads to three possible outcomes after start-up intention of nascent entrepreneurs, i.e. 'started a business', 'gave up' and 'still trying'. Some studies mention the constraints of financial resource for investments in business facilities cause to variation in the development of an enterprise, that limit owner-manager's decision to transit to the next stage (Cooper, 1981; Kessler & Frank, 2009). While some suggests various personal and contextual factors that may be influential throughout the transition process of a firm (Frank, et al, 2007; Davidsson & Honig, 2003). Figure 3.1 illustrates the small enterprise growth stage as dominantly mentioned in the literature.

It is found that most studies on development stage of firm are limited to high technology manufacturing companies, which involved managers or directors, and based on western developed region. It is believed that due to differences level in

capital and resources, small firms based in rural developed region may not progress the same as growth-oriented firms mentioned by Cooper (1981) and Frank, et al (2007).

Figure 3.1: *Summary of Development Process of an Enterprise*



Sources: Kessler & Frank (2009), Frank, et al. (2007), Davidson & Honig, (2003), Reynolds & Miller (1992), Cooper, (1981).

It has long been recognised that very few entrepreneurs follow the theorised pattern of growth, i.e. from initial start-up to exponential growth to mature enterprise. One reason for this is that economic outcomes are not always the primary goal when engaging in the entrepreneurial process. For example, Douglas and Shepherd (2002) find that income maximisation is not a significant predictor of entrepreneurial intention, meaning that prospective entrepreneurs do not always expect to get richer from entrepreneurial activity. Likewise, other studies of business start-ups have found that non-financial motives like personal satisfaction (Shabbir & Gregorio, 1996), flexible lifestyle (Walker & Brown, 2004; Lerner, et al, 1997), and passion for work (Baum & Locke, 2004) are more important reasons for getting involved in entrepreneurial activity than financial ones. Therefore, many entrepreneurs might stay with the size or level of business activity that they are comfortable with rather than continue to a greater level for higher income.

It is also found in the literature that small enterprises transition and grow based on the decisions entrepreneurs make in terms of their preferred level of entrepreneurial activity, for example, their preferred amount of time/hours spent on entrepreneurial activity (Cooper, et al, 1997; Kessler & Frank, 2009), or their location of premises (Roberts & Robinson, 2010). These, in turn, also influence the performance of the enterprise. The status and premises choices of small producers are of particular interest to the current research. The next section, therefore, discusses in more depth how entrepreneurs make these choices.

3.3.3 Small Enterprise Status and Premises

It is implied in traditional models of small enterprise growth that enterprises shift from one level to a greater level of commercialisation, for example, from home-based production to family workshop (Miraftab, 1994) or from a sideline basis to full-time basis, and from single to team up operation (Kessler & Frank, 2009). Operating an enterprise on a full-time basis or in a dedicated premise is always regarded as a greater level performance. For example, Marshall (1961) asserts that small enterprises that develop mechanisation and full occupation may benefit from greater efficiencies, economies of scale, and flexible specialisation of labour, thus increasing performance. Kessler & Frank (2009) also found that entrepreneurs who decide to commit full-time to start-up activity increase the probability of realisation compared to entrepreneurs who start-up as a sideline activity.

It is of interest for this study to know what makes an entrepreneur choose to commit to full-time status, or dedicated start-up premises. Some studies suggest several factors that influence the entrepreneur's decision to commit to a greater level of commitment. Kessler and Frank (2009), for example, found the 'person dimension' of higher levels of risk-taking propensity and the 'resource dimension' of intrapreneurial experience as significant predictors at full-time start-up activity. Holmes and Zimmer (1994) in their study of growth and non-growth firms, found that owner-managers who operate on full-time basis and from business premise are likely to develop contact with outside parties, including venture capitalist, creditors, and shareholders, in order to increase their wealth. Walker and Brown (2004) found the decision of owner-managers to operate their business from external premises and

not from a home-base is motivated by 'financial focus' factors of the owner-manager. Although the literature is limited to studies based on developed countries and does not really study the process the owner-managers go through before deciding to commit to a greater level of activity, they lend some insight to this study that entrepreneurs commit into a greater level of business activity because of the financial rationale, i.e. income maximisation. Whereas, for the question what makes an entrepreneur choose to commit to a modest level of business activity, for example, on a part-time basis or from a home-base, existing studies lend some insight that modest operation like home-based business, though always regarded as informal are becoming more desirable and feasible for some entrepreneurs over formal dedicated premises. This is because home-working can be productive, as an individual can operate peak hours around flexible schedule, and it can be less distracting than a social working environment (Soldressen, et al, 1998; Thompson, et al, 2009).

The studies mentioned above give some ideas of how entrepreneurs make choices about their status and premises, but overall there is a lack of literature on these aspects of the transition of small enterprises from an informal level of commercialisation to a greater level. In addition, the existing studies are based in western developed countries, where home-based working exists in a different context to developing countries. For example, studies relating home-based entrepreneurship to early retirement and redundancy from white collar employment (Roberts & Robinson, 2010) may not be relevant to developing countries, especially rural areas of these countries. This implies a need for primary research to explore how status and premises choices are made by small producers in this context.

3.3.4 Small Enterprise Performance

The current research aims to investigate factors influencing the growth and performance of handicraft producers in Sabah. This raises the question of what small enterprise performance is and how can it be measured. Existing literature on small enterprises and performance has devoted much attention to the measurement of performance-related outcomes for the classification of types of enterprises either as successful or less-successful. Generally, two main approaches have been used to measure the performance of an enterprise, either (i) direct outcome measure

approach or (ii) entrepreneurial intention and realisation approach. The direct outcome measure approach has been widely used in numerous studies, and involves measuring performance based on financial or accounting data. For example, Begley and Boyd (1987), in a study of the influence of psychological characteristics on the performance of small enterprises in New England, used revenue growth rates, return on assets (ROA) and liquidity ratios to indicate the level of performance of an enterprise. In their study, the revenue growth rate refers to a company's annual sales revenues over the past five years. The return on assets refers to the percentage of profit for the past five years and the liquidity ratio refers to the company's ratio of current assets to current liabilities. Lee & Tsang (2001), in a study of the effects of entrepreneurial personality traits, background and networking activities on venture growth in Singapore, used percentage of growth sales and profit over three years to measure performance. These measures involve the respondents to indicate the cumulative growth of their business with respect to sales and profits for the past three years based on six brackets rates ranging from 'less than 5 percent' to 'greater than 100 percent'. Baum & Locke (2004), in a study of the impact of entrepreneurial traits, skill and motivation to venture growth, also measured performance based on sales growth rates, but for over a 6 year period. They also included employment growth rates over the same time period as a measure.

It is found that most studies at small enterprise measure performance based on financial outcomes, mostly related to sales and profits. Wiklund and Shepherd (2005) assert that regardless of how start-ups are developed and oriented, entrepreneurs ultimately translate the final results of development of their firm into financial performance. Some studies mention several advantages of direct outcome measures of performance, first, this approach is perceived by researchers as more accurate, especially when it is self-reported by the respondents (Baum & Locke, 2004). Second, this approach is convenient because it may increase respondent participation, especially when categorical options for response are used (Begley & Boyd, 1987; Lee & Tsang, 2001). Nevertheless, there are also disadvantages with using direct outcome measures of performance. First, this approach will not be workable when respondents tend not to reveal their financial data to the public (Poon, et al, 2006). Second, this approach may have a tendency of getting unreliable

responses on financial performance, especially when the company is privately held (not listed on the stock exchange), and sufficient information about the company's financial reports is not available (Watson, 2007).

An alternative approach to direct outcome measures of performance is the entrepreneurial intention and realisation approach. This involves measuring the performance of an enterprise based on the behavioural decisions or interests of entrepreneurs. For example, Chandler and Jansen (1992) in their study of founder's self-assessed competence and venture performance used qualitative measurement for performance, i.e. market share, measured by categorical response, namely 'decreasing moderately', 'holding its own', 'increasing moderately' and 'increasing rapidly'. Walker and Brown (2004) in their study of success factors for small business owners included indirect measures of outcome as performance indicators, i.e. personal job satisfaction, pride in job, flexible lifestyle and being one's own boss. Poon, et al (2006) used self-reported measures of performance by asking entrepreneurs to rate the performance of their own enterprise in the form of a magnitude scale. West and Noel (2009) in their study on the impact of knowledge resources on new venture performance used the subjective assessments of the respondents about levels of performance being achieved relative to competitors, measured in percentages from 1 to 100 percent. Indirect measures of performance have the advantage of supplementing insufficient data about performance obtained by direct approaches (Poon, et al, 2006). Besides, this approach is suitable when dealing with small enterprises which refuse to disclose information about their income, or when detailed financial information about an enterprise is not available (Poon, et al, 2006).

Overall therefore, the direct measures of performance can provide logical and valid data, but in some instances, these measures might be inappropriate or inadequate without supplementary qualitative outcome data. It is important to understand that non-financial criteria can be used to measure performance, which allows richness of data relating to performance.

3.4 Factors Influencing Small Enterprise Performance

3.4.1 Introduction

This section reviews the literature relating to a central question of the current research: what factors influence the development and performance of small enterprises? Many studies have addressed this question, but have taken into account different types and combinations of factors. The traditional focus of studies of entrepreneurial performance has been towards person-related factors, in particular personality traits. Most of the personality dimensions mentioned in the literature often based on the psychological works, for examples need for achievement and risk propensity (McClelland, 1987) and internal locus of control (Brockhaus & Horwitz, 1986). Previous research on entrepreneurship and start-up has showed diverse results regarding which traits might differentiate successful from less successful entrepreneurs, for example, McClelland (1987) suggests entrepreneurs demonstrate stronger 'need for achievement' than other professionals. Brockhaus and Hortwiz (1986) found successful entrepreneurs exhibit a greater 'internal locus of control' than less successful entrepreneurs, i.e. believe in the efficacy of their own behaviour and not rely on external forces, such as destiny or luck. Begley and Boyd (1987) in their study on psychological characteristics associated with performance in small firms found that founders score higher than non-founders in need for achievement, risk-taking propensity and tolerance of ambiguity.

Although measurement of psychological traits continues to be popular in entrepreneurship research, and at least some traits have shown a link to performance, many studies reviewed the relationship between personality traits and founding success. In relating to financial performance for example, Begley and Boyd (1987) found entrepreneurs who exhibit moderate risk-taking propensity and moderate tolerance of ambiguity will experience increases in returns on assets. Frank, et al (2007) in their study on the significance of personality traits in entrepreneurial orientation suggest that potential entrepreneurs who perceive high need for achievement and internal locus of control influence their start-up intention to the subsequent level in start-up process, i.e. start-up realisation stage.

Robinson, et al (1991) argue that the use of a trait-based approach is inappropriate because those characteristics are also meant for identifying the traits of

individuals in other fields like salespeople, professionals and managers. The factors for successful entrepreneurs should be measured with instruments that are specific to the dynamic interactive phenomena of new venture creation (Robinson, et al, 1991). In addition, Baum & Locke (2004) assert that there are other person-related variables like competencies, motivation, skill, cognition and behaviour which have important effects on performance, but which have not been examined as fully as psychological traits. More recently studies have paid greater attention to these cognitive and behavioural factors rather than merely focusing on psychological traits as the dominant factors for performance. For example, Walker and Brown (2004) in their studies on success factors for small business owners found non-financial motivations like personal satisfaction, independence and flexibility influence people to go into small business ownership. In addition to the motivations, another person-related variable which is examined in the context of small enterprise performance is that of skills and knowledge. For example, West and Noel (2009) in their research on the impact of knowledge resources on new venture performance suggest that knowledge gained from experience in previous related business and information gathered through networking skills are the strong predictors of performance.

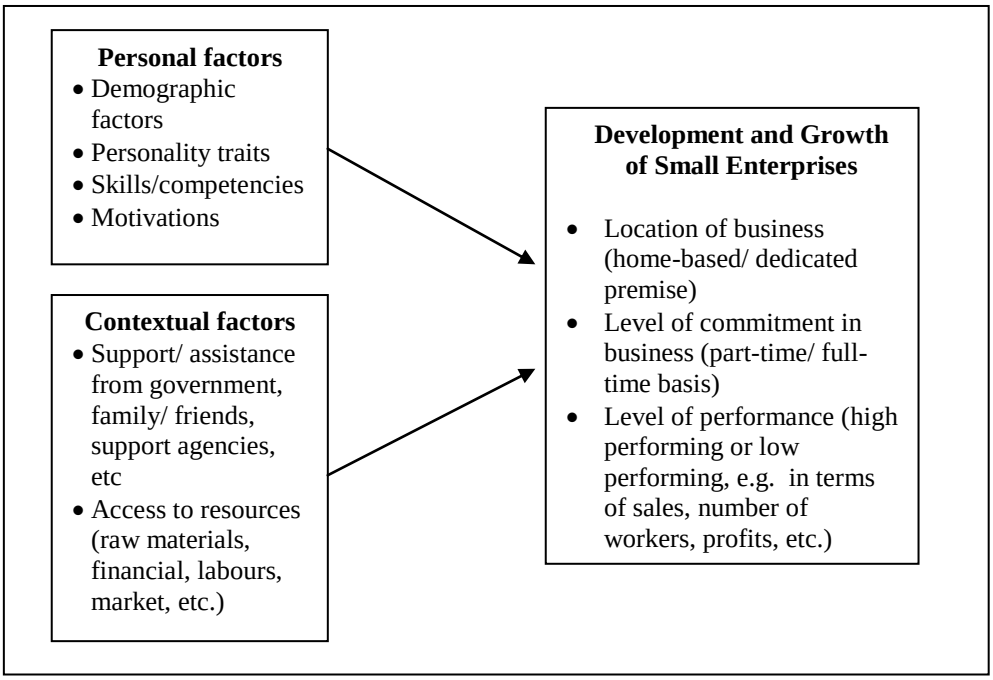
Some authors highlight the importance of contextual factors in explaining entrepreneurs' performance. For example, Gartner (1985) contended that the creation of a new venture is a multidimensional process that involves a dynamic interaction of the individual, the firm, the environment and entrepreneurial behaviour. This implies that, for studies in entrepreneurship, it is important for researchers to consider other possible influences throughout the development and growth of an enterprise, rather than merely depend on person-related traits of an entrepreneur. Low and MacMillan (1988) also argued that meaningful research should adopt a more contextual and process-oriented focus, i.e. seeking to understand how entrepreneurs behave throughout the entrepreneurial process and how relationships with external forces affect their enterprises' performance. Examples of context-related factors which have been linked in previous studies to small enterprise performance include a skilled labour force and accessibility of new markets (Gartner, 1985), social support (Naffziger, et al, 1994), business networking (Lee & Tsang, 2001) and availability of financial resources (Korunka, et al, 2003). Gartner (1985) in his reviews of

entrepreneurship literature suggests list of variables of new venture creation including the individual's environment, organisation and process. He proposes that aspects of the individual's environment, like the presence of experienced entrepreneurs, a skilled labour force, governmental influences, and access to customers or new markets are factors that stimulated entrepreneurship. Nafziger, et al (1994) assert that business owner having sufficient 'social support' from entrepreneurs' peers, family, and mentors will continue to pursue entrepreneurship. Lee and Tsang (2001) in their study on the effects of personality, background and network activities on venture growth suggest that entrepreneurs having connections with external people in the business network has positive effects on sales and profits of their enterprise. It is believed that networking activities may help an enterprise to generate new ideas, solve problems and develop new business (Lee & Tsang, 2001). Korunka, et al (2003) added the financial situation into their resource variables in their study on factors for the start-up process. They find the entrepreneur's income, personal savings and financial responsibilities for family make essential contributions though have modest impact to start-up process.

A number of studies have developed models of the relationship between different personal and contextual factors and small enterprise performance. Some examples of these are: Naffziger, et al (1994), which includes personal disposition factors (e.g. attitudes, goals, perceptions and expectations) as well as external environment factors (e.g. supportive network, availability of resources and accessibility to market); Baum and Locke (2004) produce a model which includes entrepreneurial traits (passion and tenacity), a person's motivation (goals, self-efficacy and vision), new resource skills (activities of finding capital and human resources and ability to set up new operations and new systems) to have impact on a venture growth. Lee and Tsang (2001) suggest a model which shows the relationship between personality (internal locus of control, self-reliance, need for achievement) and background (number of partners in company, frequency of external communication, experience and education) of an entrepreneur and venture growth. Taking all relevant studies into account, Figure 3.2 summarises all the factors that may influence the performance of small enterprises, according to the literature. This Figure represents the basic conceptual framework for the current research. It

proposes that a combination of two sets of factors – person-related and contextual – influence small enterprises' performance. In addition, it proposes that these factors also have an influence on the status (full-time or part-time) and location (home-based or dedicated premises) choices of entrepreneurs. The next sections discuss in more depth the literature relating to these factors, and how they influence performance, taking each one in turn.

Figure 3.2: *Conceptual Framework of Factors Influencing Small Enterprise Performance*



3.4.2 Personal Factors influencing Performance

Studies that have investigated personal factors are based on the belief that small enterprise performance is the result, to a greater or lesser extent, of the personal traits, characteristics, competencies and/or motivations of entrepreneurs. Many studies of small firm performance have included person-related measures in their analyses. In many instances though, the effects of different factors is not consistent. Four person-related factors are reviewed here, based on the fact that they are commonly investigated for their relationship to firm performance, i.e. (i) demographic/ background/ experience of entrepreneur, (ii) personality traits, (iii) skills/competencies and (iv) motivation/ goals.

(i) Demographic/Background/Experience of Entrepreneur

Previous studies on factors for small business development and performance have provided different results concerning the influence of demographic factors like age, gender, education, family background (Kodithuwakku & Rosa, 2002), parents owning a business, or work experience prior to owning a business (Bhagavatula, et al, 2010; Kalantaridis & Bika, 2006, Davidson & Honig, 2003). Some studies contend that these variables are unlikely to have a large contribution to subsequent venture performance, for example those relating to an entrepreneur's previous start-up experience (West & Noel, 2009) and formal education (Davidson & Honig, 2003). On the other hand, some demographic variables do appear to have predictive value for entrepreneurial intention and venture performance, for example the entrepreneur's background and family background (Stanworth, et al, 1976; Robinson, et al, 1991; Lee & Tsang, 2001), age and education (Gartner, 1985), entrepreneur's life-cycle stage (Naffziger, et al, 1994), previous training/incubation (Totterman & Sten, 2005) and gender (Cooper, et al, 1994). Although not all studies relating these demographic factors to performance found strong significant relationships, many studies include them at least as control variables that might indirectly influence firm performance. These findings imply a need to include demographic factors like age, gender, family background, marital status, and levels of education and experience as possible predictors of firm performance.

(ii) Personality Traits

Many early entrepreneurship scholars studied entrepreneurship using a traits-based approach, i.e. they proposed unique personality characteristics that differentiate a successful entrepreneur from a less successful entrepreneur. Traits which were most commonly studied were need for achievement, locus of control and risk taking propensity, the ones first proposed by works of McClelland (1987) and Brockhaus and Horwitz (1986) as frequently associated with entrepreneurial behaviour. McClelland defines need for achievement as the ability of an individual to see and act on opportunities, efficiency orientation, high quality work, systematic planning and striving for excellence. Locus of control refers to an individual's perceived ability to influence events in their lives. Persons with a high locus of control perceive

that the outcome or value they receive is determined by their own behaviour, rather than by external factors. Krueger, et al (2000) linked high locus of control to self-efficacy as both involve perceptions of the individual towards their personal control in a given situation. Perceived self-efficacy is included as key attitudinal variable of intention in the Theory of Planned Behaviour (Krueger, et al, 2000). The third personality characteristic is risk inclination or risk taking propensity. Begley and Boyd (1987) define risk taking propensity as the willingness to commit to a course of actions which may result in rewards or penalties associated with success or failure. Their study found entrepreneurs exhibit moderate risk taking propensity to achieve growth. Similarly, McClelland found entrepreneurs exhibit medium levels of risk taking propensity. However, Brockhaus and Horwitz (1986) and Timmons, et al (1985) suggested risk taking propensity has no direct effect on financial performance in which risk avoidance is less important when there is enough asset to protect their risk.

These three personality traits have been widely investigated in both early and recent studies, as predictors of types of entrepreneurs as well as firm performance (Gartner, 1985; Begley & Boyd, 1987; Lee & Tsang, 2001; Korunka, et al, 2003; Frank, et al, 2007). Overall, these factors are a little controversial. Although they have been intuitively expected to have a strong link to performance, and some empirical studies do confirm some positive results, other studies have been unable to find any strong links. The next paragraphs present some of the conflicting results. Lee and Tsang (2001) find need for achievement is the most influential personality trait of those they studied although overall findings show that traits have a smaller impact than entrepreneurs' industrial and managerial experience on explaining venture growth. Similarly, Frank, et al (2007) find a significant relationship between personality traits (need for achievement, risk propensity and locus of control) and start-up intentions, however, the impact showed somewhat diminishes throughout the development stage of the enterprise, i.e. when approaching start-up realisation and business success. Begley and Boyd (1987) found having high risk taking propensity will influence the entrepreneur's decision to start-up, however, their traits become less important to entrepreneurs when they have achieved higher returns on assets. At the same time, no relationship was found between locus of control or need for

achievement and performance, although these traits did distinguish founders from non-founders. Begley and Boyd (1987) perceived the curvilinear effects among founders and non-founders towards performance might be due to methodological shortcomings especially relating to weak representative samples and biased scales used for the measures of traits in the questionnaire.

Furthermore, in relating to studies on the effect of personality traits on performance, previous research about the most significant traits in terms of their association with venture growth present anomalous results, some traits have direct effects on firm performance, while some traits show a weak impact or indirect influence on performance. For example, meta-analysis by Johnson (1990) identifies need for achievement as the predictor trait of performance although it has pretty weak explanatory value. Meanwhile, Baum and Locke (2004) investigate passion and tenacity and find these personality characteristics have an indirect effect on venture growth, via their effect on situation-specific factors of goals and self-efficacy. In their study, self-efficacy which is defined as confidence in own abilities seem to be a trait, although they argue it is not. Albeit the weak influence of traits on quantitative venture growth (Lee & Tsang, 2001; Begley & Boyd; 1987), many studies found traits are significant to behavioural or cognitive-based performance, i.e. entrepreneurial intention (Douglas & Shepherd, 2002; Frank, et al, 2007; Townsend, et al, 2010). Douglas and Shepherd (2002) find entrepreneurial intention significantly related to low levels of risk aversion and high levels of independent decision-making. Frank, et al (2007) find personality traits have some predictive role in entrepreneurial intentions, so the early start-up decision phase, but no role in long-term performance. Townsend, et al (2010) find confidence in one's own abilities is significantly related to the entrepreneurial start-up decision, which means those with more confidence are more likely to start-up. Robinson, et al (1991) study classic personality traits like need for achievement and locus of control but investigate and measure these traits as 'attitude' which involves cognitive, feelings and behavioural components that a person holds about an event or object. They suggest that attitude model as a better approach to understand the factors of entrepreneurial behaviour, i.e. start-up intention and growth, in which they find that innovation in business, perceived personal control of business outcomes and perceived self-esteem are all significant predictors

of entrepreneurship, though only need for achievement is not significant. This reinforces the argument of Baum and Locke (2004) that personality traits may have more significance than previously identified if they are expressed and measured more appropriately.

Overall, it can be said that there is no consistent relationship between personality traits and performance, with previous studies providing diverse results, i.e. some found weak results to firm performance, while some found these traits are more significant throughout the development stage of an enterprise. Despite of incoherent findings about personality traits, it is still of interest for this study to include traits variable into the current research. This is because it is believed that industry characteristics affect venture performance, thus, it is good to investigate the trait-performance relationship in other industries like the rural small enterprise in handicraft sector, which may produce other significant results. Furthermore, as mentioned by Begley and Boyd (1987) and Johnson (1990), methodological concerns and measurement issues may contribute to the incoherent relationships. In addition, Baum and Locke (2004) assert that there are other vital individual difference variables that might have indirect effects on performance that are often being overlooked or neglected by researchers. Therefore, it is believed that an appropriate research strategy and analytical techniques may provide better evidence of relationship between traits and performance.

(iii) Skills/Competencies

While previous studies have found mixed support for a relationship between personality traits and firm performance (Lee & Tsang, 2001; Begley & Boyd, 1987), a growing number of studies contend that the personal abilities of entrepreneurs (having adequate knowledge and skills related to business) have an impact on the development and growth of an enterprise (Lerner, et al, 1997; Davidson & Honig, 2003). Nevertheless, reviewing the evidence of the effect of skills on performance is somewhat difficult due to different conceptualisations made by studies towards skills or competencies. For example, ability to network (Lee & Tsang, 2001; West & Noel, 2009), ability to acquire resources and to plan (Baum & Locke, 2004) and knowledge resources gained through related business and industrial experience (Davidsson &

Honig, 2003; West & Noel, 2009) may all be considered as types of skill, even though they may not be described like that in the studies.

Some positive relationships have been found in the literature between entrepreneurs' skills and firm performance. For example, West and Noel (2009) include networking activities in their model of entrepreneurial performance and find a strong significant relationship with performance. These authors also find a significant relationship between experience gained from previous related business and performance, especially knowledge related to business strategy, technology and production, marketing and sales approach. Likewise, Davidsson and Honig (2003) propose knowledge gained through business education and previous start-up experience has positive but weak effects on start-up discovery. Interestingly, they find the effect of knowledge seems to be stronger during start-up progression and realisation only when it is supplemented with networking abilities, either having contact with family, community-based institutions or business organisations. On the other hand, Cooper et al (1994) find a weak direct effect between traditional entrepreneurial skills (based on a person's background or biodata, e.g. level of education, attended course/training, work experience, use of professional advisors/mentor) and the performance of an enterprise. In a different approach, Chandler and Jansen (1992) describe skills as roles played by business founders, and propose three main types of competencies of founders, namely entrepreneurial role, managerial role and technical-functional role. Through their self-evaluated competencies approach, they find a significant relationship between founders' abilities in managerial, interpersonal and technical skills and venture performance. Referring skills to broad dimensions of a person's role in starting and growing an enterprise, this study proposes having appropriate skills as another person-related variable which may affect performance.

(iv) Motivation/Goals

Many studies which measure the influence of personal characteristics on small firm performance include investigation of entrepreneurs' reasons or motives for starting their enterprises (for example, Cromie, 1987; Naffziger, et al, 1994 and Birley & Westhead, 1994). Different conceptualisations and definitions motivation

can be identified. Cromie (1987) asserts that studies of the motivations of entrepreneurs have been undertaken using two main approaches, (i) subjective perceptions by entrepreneurs about why they act as they do and (ii) quantitative scales to measure the extent to which entrepreneurs have certain motives or reasons behind their intentions. Naffziger, et al (1994) propose that entrepreneurs are motivated to accomplish goals they set for themselves, and define their effectiveness on basis of how well they achieve them. These authors also note how goals (perceived rewards) can be both intrinsic (personal satisfaction, be own boss, having control) as well as extrinsic (financial, material) and can have implications for an individual's decision to behave entrepreneurially. Walker and Brown (2004) found entrepreneurs who are motivated by lifestyle factors like personal satisfaction, flexibility and pride in job tend to achieve lifestyle-oriented performance, i.e. modest level of business, home-based. Baum and Locke (2004) found entrepreneurs who are motivated by their own goals for income maximisation, i.e. sales revenue, and feelings of capability showed direct effects on venture growth, i.e. larger annual sales compared to those who have not. Birley and Westhead (1994) in a study of 405 managers in UK, investigate the effect of five motivations to start-up (need for approval, independence, personal development, welfare considerations, perceived instrumentally of wealth) and an additional two related components (financial benefits, and follow role models). They find these motivations could distinguish types of entrepreneur, but they find no relationship between these motivations and the subsequent growth and size of business. Similarly, Walker & Brown (2004) found that motivations for starting a business have a strong effect on the small business owner's decisions whether to grow the business or simply maintain the size. This had important implications for their choice of premises. Specifically, the authors found that owners who perceived a lifestyle motive as important (personal satisfaction, pride in job, flexible lifestyle and being own boss), operated their businesses home-based, while those who perceived financial motives as important (making money) operated their businesses at a greater level of commercialisation, i.e. external-based. Overall, therefore, the evidence is more consistent on the effect of motivations on performance, compared with other person-related factors. It is important that motivations are included for investigation in the current study.

3.4.3 Contextual Factors influencing Performance

Many studies of entrepreneurial development propose that the meaningful value of personality traits in the course of commercialisation is only possible in conjunction with additional influencing factors in the founder's environment (Korunka, et al, 2003; Lee & Tsang, 2001; Baum & Locke, 2004; Frank, et al, 2007). Gartner (1985) highlights a range of infrastructural factors important to new venture creation, like availability of skilled labour, accessibility to transport, accessibility to customers and new markets, and availability of financial resources. In fact, many studies have demonstrated the importance of availability of resources, such as raw materials (Berma, 2001), financial (Berma, 2001; Chan, 2005, Korunka, et al, 2003), technically skilled labours or helpers (Roberts & Robinson, 2010) and market opportunities (Cooper, 1981) as factors that may influence the development and growth of an enterprise. In the same way, support and assistance from related agencies, for example government agencies are well known to be influential to the development and growth of small enterprises. Some studies contend that government support, for example provision of subsidies of raw materials and machinery, production space, and training facilities are critical factors for business formation and success (Begley, et al, 2005; Kader, et al, 2009). Baum & Locke (2004) include 'environmental munificence' as a control factor in their study; this refers to the extent to which the entrepreneur's context (market demand, community support, availability of financial resources, and competitive threats) is helpful or challenging to entrepreneurship. In another way, Davidsson (1995a) highlights how the contextual setting of entrepreneurs can influence their performance. He makes a very strong case about the importance of cultural (values and beliefs about entrepreneurship), and structural characteristics (socio-economic context) on the development of entrepreneurship in regions. In his results, he finds that the cultural values of regions have an influence on entrepreneurship levels, and infrastructure conditions (small firm density, population dynamics, levels of unemployment, regional development support) have strong influences on entrepreneurship.

Another kind of contextual influence on entrepreneurs is the social factor. Naffziger, et al (1994) proposes that 'social support', including friends, family, and role models, can act as a push factor to entrepreneurship. This can be for practical

reasons, because close friends and family can provide secure and consistent access to resources, access to new markets and a source of supply of skills which are found to be relevant factors to the entrepreneurial process (Davidson & Honig, 2003; Rodriguez, et al, 2009). Kreuger, et al (2000), drawing from the Theory of Planned Behaviour, highlight how social norms influence what entrepreneurs do, i.e. entrepreneurs' perceptions of how important people in their lives like family and friends influence their attitudes towards start-up intention. These authors argue that support received from the social network is influential not only from a practical point of view (as sources of finance or practical assistance), but also in terms of emotional support (giving confidence, or reassurance that what the entrepreneur is doing is valuable and worthwhile). Krueger, et al's findings suggest that social norms have at least a moderate effect on entrepreneurial intention, with the influence of social support in entrepreneurs' lives acting as a mediator to their attitudes or decision on start-up intentions.

Overall, these factors drawn from literature suggest that other than person-related factors, external factors in the entrepreneur's surroundings (support, resources and opportunities) may contribute to the development and growth of an enterprise. The next section discusses the development and growth of small enterprises in the handicraft sector.

3.5 Handicraft Producers: Characteristics and Performance Factors

3.5.1 Introduction

This section now discusses the characteristics and performance factors of small enterprises in the handicraft sector. Although many studies have been conducted on small enterprises, only a relatively small number relate to non-urban, non-western settings, i.e. small-scale enterprises in rural areas, developing countries, and especially the handicraft sector itself. Existing research on rural small enterprises is often based in Western developed countries (North & Smallbone, 1996), and often involves highly educated samples (Soldressen, et al, 1998), which pose different implications for a rural, developing region like Sabah, Malaysia. Furthermore, available studies on the handicraft sector often focus on identifying success factors based on production and marketing activities of handicraft enterprises (Soldressen, et

al, 1998; Kean, et al; 1996; Giron, et al, 2007; Paige & Littrell, 2002). Only a few focus on understanding handicraft producers' behaviours and experiences in starting and growing an enterprise (Berma, 2001; Bhagavatula, et al, 2010). So, the existing literature on small rural, or handicraft enterprises provides some relevant insights for the current research, but some findings need to be read with caution.

3.5.2 Characteristics of Handicraft Producers as Small Enterprises

Handicrafts can be defined as those items that are normally hand-made products, with attention to materials, design and workmanship. Often, handicrafts have a decorative or wearable function, and can have the purpose of providing beauty and aesthetic value (Kean, 1996; Paige & Emery, 2002). In the context of the handicraft sector in Sabah, the raw materials used are largely nature-based resources (Berma, 2001) for example tree-bark, woods, clay, stone, and metal, and the skills of making are often inherited from parents or the elderly (Dhamija, 1975; Berma, 2001). In terms of business operation, it can be said that handicraft producers are often micro-enterprises undertaking a highly labour intensive operation involving customized, hand-made, or semi-mechanised systems (Berma, 2001). In relation to Malaysia, Berma (2001) explains that handicraft production is largely located in rural areas, and is typically run by local people, in a modest or informal setting, i.e. home-based or on a temporary basis. The producers are largely female, as handicraft work has always traditionally been associated with wives/mothers' past-time activity alongside household work (Dhamija, 1975; Berma, 2001). Production is often closely linked with folk rituals and festivals which mean that preservation of culture can be a reason for producers to continue in handicraft production (Dhamija, 1975; Berma, 2001). Normally there is no hired labour and start-up is characterized by little capital investment (Soundarapandian, 2001; Berma, 2001).

As these handicraft producers are located in rural areas, the literature argues that they experience greater challenges, for example in terms of accessibility to resources. Bhagavathula, et al (2010), in a study of textile weavers in India, assert that producers' social networks (like family, friends and officials) are important source of resources. They find that most textile weavers rely on family and friends for financial resources, especially at the start of their venture. Producers often

practice informal financial management, i.e. simple accounting or costing rather than having formal financial records (Harper, 1991; Berma, 2001). In relating to sales, producers often practice approaches like making to order, having a stall at a weekly market, or use of middlemen or retailers, which do not require them to incur transportation cost (Berma, 2001; Paige & Emery, 2005).

In terms of performance, small scale handicraft producers are most often described as low-growth-oriented firms. Many do not expand even after a long period of operation because the owners prefer to maintain a certain level of operation rather than achieve growth. This is parallel to Soldressen, et al (1998) who mention that intrinsic enjoyment like personal happiness, to be independent and sense of accomplishment (life-style oriented firm) are more important than making profit to textile producers in US. In the context of handicraft producers in Malaysia, especially in rural areas, practical challenges may also prevent growth, for example Berma (2001) found several constraints to handicraft producers' involvement in commercialised handicraft in rural Sarawak, namely market constraints, financial constraints, slow production due to traditional production, non-availability of quality raw materials supply, lack of skilled labour and lack of appropriate support from relevant institutions like government or banks. These constraints limit the involvement of handicraft producers into formal production as desired by the government, as it is believed it might provide higher income. According to an article from Sabah Development Corridor (2008), handicraft production in Sabah is poorly organised, and most villagers are involved on a part-time basis and cannot make a viable living from their activities. As a consequence, most craft retailers prefer to import handicraft products from Indonesia and the Philippines as they are easier and cheaper to be resembled as Sabahan crafts.

3.5.3 Relevance of Small Enterprise Theories to Handicraft Producers

The preceding section has explained the characteristics of handicraft producers as small enterprises. This section discusses how relevant to the current research are the theories in the small enterprise literature generally, as well as studies on handicraft production. In terms of the theories in relating to development and growth of small enterprise, it can be argued that small enterprise in the handicraft sector

might not follow the logic of the development and growth as portrayed in the general entrepreneurship literature. For example, Marshall's theory that suggests economic expansion is possible through generating economies of scale. This can be a problem for handicraft firms because part of the value of handicraft products is the use of manual labour rather than mechanisation. Although modern machines for mass production of handicrafts can reduce the cost of production and increase efficiency, these come at the expense of the quality of the products (Berma, 2001). In a similar way, Schumpeter's theory of innovation as important for small enterprise growth holds problems for handicraft firms. Innovation or modernisation of production may cause handicraft products to lose their special quality and value. The logic of innovation may not apply to handicraft firms also for practical reasons, where firms are located in remote or rural areas. Access to infrastructure or capital to invest in research to support innovation could be more difficult (Kader, et al, 2009). In fact, some studies argue that small enterprises in rural areas achieve competitive advantage not through innovation or having advanced technology in production, but through developing social networks for access to resources and markets (Soldressen, et al, 1998; Bhagavathula, et al, 2010). Berma (2001) also argues that the importance of handicraft production is not limited to income maximisation, but also to socio-cultural development aspects like better educated communities, and the creation of employment. So the development logic for handicraft producers in these areas may be different from the classic theories.

A second issue for the current research is that most literature on rural and handicraft firms is based in western developed countries (North & Smallbone, 1996) or on growth-oriented enterprise (Soldressen, et al, 1998, Bhagavathula, et al, 2010), and only a few focus on micro-enterprises in developing countries which involve traditional production and local-based resources (Berma, 2001; Kothadiwakku & Rosa, 2002; Kader, et al, 2009). In most cases, rural small enterprises in western developed countries experience much higher levels of infrastructure support and access to resources compared with a developing country context. In addition, handicraft firms in western countries often are so-called 'art-related businesses', possessing different characteristics from developing country handicraft producers, for example in terms of environmental constraints, opportunities for support or

reasons for undertaking handicraft production. These differences suggest a need to study the Malaysian handicraft producers on their own terms, not to assume that they behave like western, developed country handicraft producers. From this point of view, it is believed that entrepreneurship models based on entrepreneurial intentions or goals (Davidsson, 1995a; Frank, et al, 2007; Townsend, et al, 2010) are important to consider, in which the development of an enterprise takes into account the goals of the entrepreneur, instead of, or in addition to, other measures of development or performance.

3.5.4 Factors influencing the Performance of Handicraft Producers

This section discusses factors influencing the performance of handicraft enterprises. It is based on reviews of relevant literature on studies relating to handicraft producers and small enterprises in rural areas in developing countries. A number of studies in this literature find that external factors, in particular, have importance in contributing to the performance of small rural entrepreneurs. For example, two influential factors which are often mentioned in the literature are government assistance for entrepreneurial development (Yusuf, 1995; Sarder, et al; 1997; Kader, et al, 2009) and social/family networking (Honig, 1998; Chan, 2005; Bhagavathula, et al, 2010). Nevertheless, internal factors like personality traits, skills and motivations are also found to contribute to performance.

Yusuf (1995) in his study of entrepreneurs in the South Pacific region found that government assistance was more crucial to local small entrepreneurs than in-migrant rural entrepreneurs. Yusoff (1995) assert this is because the in-migrants have greater external exposure, for example, overseas experience and established business networks, than the local entrepreneurs, which allows them to have a greater experience and resources to draw from. Dhamija (1975) also found government support was critical for entrepreneurial development in rural areas, in particular subsidies for tools and equipment, and technical guidance on marketing and finance. Likewise, Kader, et al (2009) found rural entrepreneurs rated the training and education they received through government assistance as key factors for their development. This is similar to the early work of Sarder, et al (1997) on small enterprise support in Bangladesh, which found that entrepreneurs attendance in

technical training like marketing, management and accounting contributed to significant increases in sales, employment and productivity. These studies provide insights that government assistance for facilities/infrastructure, especially for access to resources (financial, technical knowledge and skill) is critical to local entrepreneurs in rural areas.

Many studies highlight the importance of social networks amongst rural entrepreneurs to the start-up and growth of their enterprises. Family and friends are widely mentioned as sources of resource, like financial capital (Honig, 1998; North & Smallbone, 1996; Chan, 2005), labour (Berma, 2001; Kodithuwakku & Rosa, 2002) and knowledge/skills (Berma, 2001; Bhagavathula, et al, 2010). Honig (1998) asserts those entrepreneurs' networks with extended family and community-based relationships are likely to increase the establishment and growth of enterprises through the accumulation and utilisation of resources, especially credit. Chan (2005) also finds small business owners in rural Malaysia typically rely on informal social networks, especially family and friends, as sources of financing. Bhagavathula, et al (2010) in their study of textile weavers in India, find family and friends are the main source for obtaining resources, especially financing, at the initial start-up phase. Social networks are also used to find labour. A number of studies mention lack of skilled labour as one of the main reasons why small enterprises in rural areas are not so well developed compared with those in urban areas (Kalantaridis & Bika, 2006; Shaolian, 2000). Berma (2001) explains that handicraft producers depend on their family to take up handicraft production when they are unable to find labour. Similarly, Kodithuwakku and Rosa (2002) find rural entrepreneurs' use social contacts like, family, friends and villagers as sources of labour and credit. Some studies mention the importance of the social network as a source of human capital, i.e. knowledge and competencies likely to have an impact on performance. Bhagavathula, et al (2010) identify that relationships with family (social capital) mediate the impact of knowledge and skills (human capital) towards resource mobilisation and opportunity recognition among textile weavers in India.

Besides family and friends, some studies highlight how rural entrepreneurs also develop networks with intermediaries and other entrepreneurs or organisations in their surroundings for better market opportunities. Kader, et al (2009) found rural

entrepreneurs rated the establishment of good networks with wholesalers and retailers to penetrate niche markets as one of their success factors, though business technical skills were also rated as important. Berma (2001) highlights how handicraft producers in rural Kapit, Sarawak, sought advice from fellow crafts persons of the prices they should charge for their handicrafts. Kodithuwakku and Rosa (2002) found rural entrepreneurs coordinated with traders and middlemen to share information about customer and competitors. Lerner, et al (1997) in their study of factors influencing the performance of women-owned enterprises in a developing country, found that network affiliations like membership of social or trade associations provided potential markets for their products and services, thus increasing profitability. Overall, these studies imply that network affiliations contribute to some aspects of human capital (knowledge and competencies) which may influence the development and performance of small and handicraft enterprises in a developing country context. Other than external influences on entrepreneurship, personal-related factors like goals or motivations of entrepreneurs have also been found to effect development and growth of handicraft enterprises. Soldressen, et al (1998) found that craft entrepreneurs who aim for profit in their enterprise experience a significant effect on performance. Nevertheless, most studies of handicraft producers find 'non-financial motives' as important, for example, personal happiness, to be independent (Soldressen, et al, 1998), to pursue craft tradition (Berma, 2001) or to reinforce the region's cultural identity (Paige & Emery, 2005). These findings emphasise the importance of taking into account handicraft producers' goals or motivations when measuring their performance.

Overall, it is found in the literature that government assistance, 'network affiliations' and goals/motivations have particular influence on the development and performance of small-scale handicraft enterprises. Nevertheless, much is still unknown about the nature of these influences, for example, the relative importance of each factor or the extent to which any of them has impact at different levels or stages of commercialisation. For example, family and friends might be the main sources of support during initial start-up stage, whereas government agencies and intermediaries might become more important sources of information and market opportunities as the enterprise matures or grows. Therefore, the current research

needs to explore further empirically, the specific factors that may be important in the commercialisation process in the handicraft sector.

3.6 Implications for the Current Study

This chapter is guided by the main aim of this research, i.e. to understand why so few handicraft producers in Sabah move from domestic to workshop-based production. The literature reviewed for this study provides insights into the characteristics of small enterprises, and the factors influencing their start-up, development and performance. The chapter has also reviewed literature on handicraft firms in rural and developing country contexts, and has noticed the different characteristics these firms have. As a result, handicraft firms may not follow the logic of growth theories in the main entrepreneurship literature. This section discusses the implications of the literature review findings for the current research and the design of the empirical study.

The first implication relates to the type of information about handicraft producers that is needed for the current research. Much extant research on small enterprises has emphasised factors associated with start-up intention and business success, focusing mainly on 'what' makes high or low performance, rather than 'how' and 'why' individuals make decisions towards commercialisation. In particular, little is known about the 'how' and 'why' of the process of start-up and transition of small enterprises in the handicraft sector. Therefore, a key aim of the empirical study will be to explore these processes, as well as investigating the relative importance of different person-related and external factors on the performance of handicraft firms. As a starting point for investigating these factors, the empirical study will use Figure 3.2 as a conceptual framework.

A second implication relates to the central issue of what motivates the status and premises choices of handicraft producers, and how these are related to performance, The literature review found few studies that have investigated how entrepreneurs make the transition from informal, home-based working to full-time status in dedicated premises. Understanding these processes would help to directly address the question of why few handicraft producers in Sabah move to full-time, workshop production, notwithstanding government support for this. Therefore, the empirical

study should investigate these processes directly. It should also investigate how status and premises of handicraft producers are linked to their performance, taking into account other factors like producers' goals/motivations. According to economic growth theory, there should be a positive link between status, premises and performance. However, other studies imply that this logic does not hold for handicraft firms in a rural or developing country context. The literature review also has provides implications for methodological considerations for the present study. Studies of an individual's behaviours like preferences, perceptions and experiences have mainly employed in-depth interviews in order to gather a more complete picture of the phenomenon under investigation (Jones, 1988; Siu & Kirby, 1998, Kodithuwakku, 2002; Ritchie, et al, 2007). Meanwhile, studies related to examining the associations between factors and performance are usually conducted through large-scale quantitative techniques in order to make generalisations of the findings (Kean, et al, 1996; Roberts & Robinson, 2010). Many recent studies of small business that have focused on understanding factors for entrepreneurial intention for start-up have undertaken a mixture of research approaches, implementing both qualitative and quantitative methods for data collection and analyses (Paige & Littrell, 2002; Kodithuwakku & Rossa, 2002; Kalantaridis & Bika, 2006). In this study, in order to achieve the main research objective, both qualitative and quantitative research approaches are needed.

3.7 Summary

This chapter has reviewed the literature relating to the development and growth of small enterprises. It has introduced the main theories of how entrepreneurs contribute to economic growth, and discussed these in relation to rural areas. The chapter has then explained the characteristics of small enterprises and discussed factors that influence performance, both person-related and external. The chapter finished by describing the characteristics of handicraft firms, in particular those in rural and developing country contexts, and discussing which factors influence their development and performance. Having explained the implications of the literature findings for the present research, the next chapter will explain the methodology of the empirical study.

Chapter 4 Research Methodology

4.1 Introduction

The purpose of this chapter is to explain the empirical work conducted for the current research, which includes the process and techniques used for collecting data needed to fulfil the research objectives. The overall aims of this research are to understand how handicraft producers behave in the commercialisation process, and to investigate the person-related and contextual factors that influence handicraft producers' status, premises and performance. Three phases of fieldwork were undertaken to address these main aims, (i) exploratory key informant interviews, (ii) in-depth interviews with handicraft producers and (iii) survey of handicraft producers. The fieldwork in this study was carried out in Kota Belud district, Sabah region, over a period of three years.

This chapter contains the following sections. Section 4.2 presents the more precise research objectives for the empirical work and Section 4.3 discusses the implications of these objectives for empirical study methods. Next, Section 4.4 explains the principles and execution of the exploratory key informant interviews and Section 4.5 presents the execution and analysis of the in-depth interviews. The chapter then goes on to Section 4.6 which discusses the process of designing and conducting the survey phase, and Section 4.7 summarises the chapter.

4.2 Research Objectives for the Empirical Study

The empirical study involved three phases of fieldwork which were designed to address specific research objectives. Table 4.1 presents the research objectives which drove the three phases of fieldwork.

Table 4.1: *Research Objectives of the Empirical Study*

Research Objectives	Research Methods
(i) To close the knowledge gaps in the nature of handicraft production in Sabah, especially about types of handicraft producers, based on secondary data (e.g. census reports). (ii) To gather insights into factors influencing or barriers for starting up and growing an enterprise. (iii) To gather views on government support for handicraft production in Sabah. (iv) To look for suggestions and recommendations for potential ways of approaching the research subject or other important contact persons.	Phase 1: Key informant interviews Main purpose: To describe the nature of handicraft sector in Sabah, identify key issues for further primary research
(i) To understand how handicraft producers first get involved in handicraft production and how their enterprises began. (ii) To understand how handicraft producers currently operate their enterprises, and the choices they have made about commercialisation, i.e. their status (full-time/part-time) and location (workshop/domestic), as well as their production techniques, skills exhibited, and how they market their handicrafts. (iii) To understand what factors stimulate (or inhibit) the move to a greater level of commercialisation, by exploring producers' perceptions of the challenges or benefits of domestic and workshop-based production. (iv) Based on the above, to gather insights on the person-related and contextual factors that may influence commercialisation and performance of handicraft producers.	Phase 2: Depth interviews with handicraft producers Main purpose: To understand deeply, from handicraft producers' own view, how they experience the commercialisation process.
(i) To investigate, in a large sample, handicraft producers' status (full-time or part-time), premises (domestic or workshop) and performance levels, and to explore the relationship between these. (ii) To investigate, in the same sample, handicraft producers' person-related and contextual characteristics. (iii) to investigate the relationship between handicraft producers' status, premises and performance, and the factors described in (ii), to identify whether the factors may explain or predict the accurate types of handicraft producers based on their status, premises and performance.	Phase 3: Survey of handicraft producers Main purpose: To test the factors influencing the status, location and performance of handicraft producers, and the relationships between them

The development of research objectives can be the result of reading relevant theories and evidence from the literature (Bryman, 2004) or from observation or discussion with people (Blaikie, 2000). Miles and Huberman (1994) mention that research objectives may be refined or reformulated in the course of fieldwork. In this study for example, the research objectives for the first phase of fieldwork emerged

from the knowledge gaps derived through reading news, reports in the media about the performance of handicraft sector and government policy as well as from secondary data such as statistical data and census reports. Then, the development of research objectives in the second phase were based on review of the entrepreneurship literature relating to how small enterprises grow, and the factors that influence performance. The objectives led to propositions about how handicraft producers develop their enterprises, and the factors that encourage or inhibit their performance. The in-depth interviews were conducted in the second phase with the aim of gaining a deep understanding from producers' experience and perceptions how they actually behave and make decisions for the development and growth of their enterprises. Again, the results of the in-depth interviews served as the source of another set of research objectives, i.e. to test which factors actually compare different types of handicraft producer, on a large scale. Therefore, the final phase of fieldwork, i.e. survey, was conducted on a large sample, to investigate handicraft producers' status, premises and performance levels and the person-related and contextual factors that influence these things. The following section explains the methodological design of the empirical study.

4.3 Methodological Design of the Empirical Study

4.3.1 Introduction

This study involved three phases of fieldwork which were essential to address the research objectives described in the previous section. The use of multiple-phase fieldwork has been widely mentioned in many studies as a way to understand further about phenomena under investigation (Kalantaridis & Bika, 2006) and it is a suitable method to study the entrepreneurship process (Kodithuwakku & Rosa, 2002). For example, in this study, three phases of fieldwork were conducted not merely to describe what is happening currently about handicraft production (types of handicraft producers and performance), but also to understand and explain what influences handicraft producers' decisions on commercialisation and relating to performance. Furthermore, this approach was a more purposive procedure because every phase was conducted to address different research assumptions derived from the previous fieldwork's outcome, i.e. data in every stage was interpreted further in the light of

data gathered at another stage (Blaikie, 2000). For example, in this study, the surprising statistical data from government census reports about the performance levels of handicraft producers posed some curiosity to the researcher about the types of handicraft producers in Sabah, but without further investigation it could not go beyond several assumptions. Therefore, conducting further research through in-depth interviews and a large-scale survey could give insight into the meanings and reasons behind the statistical patterns of the census report. In addition, the significant use of both qualitative and quantitative methods in a study is parallel to Weber's view (in Bryman, 2004) about the epistemological concerns in social research. He proposes the method to study the social world should embrace both principles of positivism and interpretivism, i.e. not merely to explain a phenomenon, but also to understand the social action that cause the phenomenon. According to Weber (in Bryman, 2004), the principle of positivism involves a deductive approach, i.e. an 'objective' approach to 'explain' a social action through testing of hypotheses derived from theory and facts, whereas the principle of interpretivism involves an inductive approach, i.e. a deeper research procedure to 'understand' the reasons for social action. Weber's views imply that a combination of both qualitative and quantitative approaches in a study is good for the knowledge gathering process. Both approaches may complement each other in terms of providing relevant data and knowledge derived from both theories and observations of the real world. Therefore, the empirical work in this study was designed around qualitative (interpretative understanding) and quantitative (scientifically explanation of the data for the development of laws/ideas) approaches to provide rich data to understand handicraft producers' commercialisation processes and performance.

4.3.2 In-Depth Interviews: Definition and Advantages for the Current Study

In-depth interviews were conducted for both the exploratory phase (key informant interviews) and second phase of the fieldwork (small-scale in-depth interviews with handicraft producers). It is understood that reviews of academic literature or data available in hand from local desk studies are valuable for a researcher to gather knowledge on the topics under investigation (Blumer, 1969), nevertheless, it is normally insufficient to make generalisations about a phenomenon

based on secondary findings. Thus, in order to bridge the gap between the research project and the current state of knowledge on the topic, further empirical study was necessary in order to address the research objectives. Therefore, qualitative in-depth interviewing was used in the early phases of this study because of its inductive, epistemology and ontology features (Bryman, 2004), which allow the researcher to understand social reality in its own terms.

Ritchie and Lewis (2003) mention in-depth or unstructured interviews as one of the main methods of data collection used in qualitative research. In-depth interviewing is often described as a form of conversation with people to seek their point of view, feelings, opinions and beliefs about any aspect of the world (Legard, et al, 2003, in Ritchie & Lewis, 2003). In that case, in-depth interviewing was used in this study because the researcher wanted to gather opinions and perceptions from several key officials and handicraft producers about "what makes handicraft producers take up handicraft production" and "how do they go through their production and commercialisation activity". In addition, as mentioned by Ritchie and Lewis (2003), in-depth interviewing allows free-flow of data shared by respondents due to its flexible structure, and besides, the use of probing in this method is useful for developing deeper understanding.

Key informant interviews in the first phase were conducted to explore the current nature of handicraft production in Sabah, from the point of view of several key officials who were knowledgeable about local handicraft production in Sabah and knew what was going on. Other than providing their point of view about the situation in Sabah, the key informants acted as gatekeepers who facilitated smooth access to approach the participants for the next phase of fieldwork (Bryman, 2004). For example, the officer of MHDC Sabah branch suggested a list of local handicraft producers who had high levels of performance. In addition, key informant interviews allows the free-flow of ideas and opinions on relevant topics of interest from people of various related agencies and with diverse backgrounds; thus, in-depth information was gathered.

In-depth interviewing in the second phase was conducted to address several issues emerging from the entrepreneurship literature and key informant interviews particularly on handicraft producers' experience of the commercialisation process

and the various perceived factors that encourage or inhibit the development and performance of their enterprises. In-depth interviews explored deeply how and why producers performed as they did by investigating their life histories and everyday activities (Jones, 1988; Kodhituwakku& Rosa, 2002; Ritchie, et al, 2007). These data provided insights for the development of the questionnaire used for the survey, in particular about the person-related and contextual factors that might explain handicraft producers' commercialisation and performance levels. As mentioned by Bryman (2004) inductive research can generate data or materials derived from in-depth understanding of social action, which can then allow the development of laws or generalisable ideas. In their study, Walker and Brown (2004) used in-depth interviews not only to explore motivations for being in business but also to establish themes for questionnaire construction. In the current study, curiosity about the data emerging from the in-depth interviews led to the development of the specific measures for the questionnaire used in the third phase of fieldwork.

4.3.3 Surveys: Definition and Advantages for the Current Study

Large-scale structured surveys were conducted as the final phase of the fieldwork. Bryman (2004) describes the survey as a method of data collection and analysis using a research instrument like a structured interview schedule, or self-completion questionnaire. Surveys are often used to find out about respondents' backgrounds, attitudes and behaviours (Bryman, 2004), and they enable statistical testing of relationships between different measures like these. In this study, the purpose of conducting a survey was to identify handicraft producers' levels of commercialisation and performance, and to test the relationship between these and the influence of person-related and contextual factors. In addition, Blaikie (2000) asserts that a representative sample in a survey will enable the results to be generalised to a larger population. Therefore, a survey was used in this study because it was hoped that the large size and representativeness of the sample could produce generalisation of the findings to the target population.

4.4 Design of the Key Informant Interviews

4.4.1 Sample Selection for Key Informant Interviews

Reading news reports and making informal visits to a handicraft village in Kudat, northern Sabah during vacation with friends, developed an intuition in the researcher that despite government programmes for entrepreneurship, not all local people in rural Sabah choose to develop commercialised production. This perception raised several questions in the researcher, such as 'is this to do with inaccessibility to government assistance due to remoteness of the area?', or 'is this more to do with the attitudes or behaviour of the producers themselves?'. These gaps in knowledge relating to the actual nature of the handicraft sector in Sabah, also not filled by secondary data (e.g. census reports) led to the decision to undertake exploratory empirical research.

In order to obtain accurate evidence on the handicraft population in Sabah, other than by collecting documents via local desk study, gathering data through experience and perceptions of relevant people was valuable. Logically, the right people to have this kind of information were the officials of government agencies involved directly in the handicraft entrepreneurial development program, like the Malaysian Handicraft Development Corporation (MHDC) and Ministry of Rural Development and Entrepreneurship of Sabah (MRD). Therefore, these government agencies were proposed as key informants because of their knowledge and experience relevant to the phenomenon under investigation (Bryman, 2004), i.e. handicraft sector in Sabah. Purposive sampling was used in selecting the right key informants from these agencies, based on their ability to give information relevant to the research questions posed, i.e. background information about nature and performance of handicraft sector in Sabah and perceived factors influencing the involvement of rural communities in handicraft production. The researcher also purposely selected an academician who had conducted research into handicraft production in rural Malaysia, whose article was found during the initial literature search for this study, i.e. Assoc. Prof. Dr. Madeline Berma in National University of Malaysia, Kuala Lumpur.

Besides MHDC and MRD, additional key informants were selected based on recommendations from MHDC and MRD when making appointments with them. As mentioned by Bryman (2004), key informants often direct the researcher to people

likely to be helpful to the progress of the investigation. Therefore, a snowballing technique was employed in selecting additional key informants from other related agencies, for example in this study, MHDC officials recommended the researcher to interview two *Adiguru* (master-craftsperson) in Kota Belud, and the Sabah Tourism Board and MMRD suggested the researcher should interview the Kota Belud District Officer and trainer in the craft incubator. Overall, individuals from four government agencies and one academician were selected for interview, as well as three people who were recommended by government officials and who were directly involved with handicraft producers, namely, a craft incubator trainer, a master craftsperson and an operator of a government-linked handicraft retail shop. Table 4.2 shows the key informants involved in the study.

Table 4.2: *Key Informants (n=8)*

No.	Name of Agency/Informant's details	Main Role of Agency/Informant	Main information gathered
1	Malaysian Handicraft Development Corporation (MHDC) Sabah Branch - Tuan Haji Mohd Mokhtar Lop Ahmad (the Director)	Entrepreneurship development among local handicraft producer in Sabah, promoting Sabah handicraft to local as well to foreign market.	• The types of handicraft producers in Sabah. • Government support programs for handicraft entrepreneurs development. • Problems/Challenges of handicraft production in Sabah.
2	Ministry of Rural Development and Entrepreneurship of Sabah - Mr.Mohd Sayuti Hatt Abdullah (Community Development Officer)	Eradicating poverty in rural area through entrepreneurship, especially handicraft, food and cottage industry. Provides training, promotion and production assistance.	• Government support programs for handicraft entrepreneurs development • Problems/Challenges of handicraft production in Sabah
3	Sabah Tourism Board - Ms. Baizurawani (Research Division)	Responsible for sales and promotion of local tourism-related products, including handicraft.	• Promotional programs of handicraft products
4	Kota Belud District Office - Mr. Najib Muntok (District Officer)	Rural development (infrastructure and community development)	• Socio-economic background of people in Kota Belud, Sabah • Government support programs for handicraft production in Kota Belud, Sabah.
5	Researcher and academician in National University of Malaysia - Assoc. Prof.Dr. Madeline Berma	Researcher and academician	• Insight into the nature of handicraft production in rural Malaysia (Sarawak) • Research methods used for her research
6-8	Informal conversation 1. Trainer in MHDC incubator *2.* Master craftsperson *(Adiguru)* 3. Owner of Handicraft Retail Shop	Involved directly with people involved in handicraft production, e.g. incubator trainees, handicraft producers and customers.	• Preliminary understanding on the nature of handicraft production, the distribution and marketing channels. • Factors encourage/barriers in starting a business

4.4.2 Discussion Guide for Key Informant Interviews

The central concern of these interviews was to get some background into who these handicraft producers are, the nature of their enterprises, as well as how they produce and sell their handicrafts, which could help the researcher to develop preliminary ideas about handicraft producers in Sabah. Therefore, several relevant questions were developed to guide the discussion with the key informants. Figure 4.1 shows the discussion guide used for key informant interviews in this study.

Figure 4.1: *Key Informant Interview Discussion Guide*

Introduction

- Thank the interviewee for their cooperation, introduce self and explain the research aims, objectives and expected outcomes.
- Gain general background of key informant: name, post, experience in related field, education.

Section 1: Background to Agency

1. What are the main activities performed? How does it support handicraft producers?
2. How successful has your agency been in their activities?

Section 2: Information on handicraft development in Sabah (tailored to agency remit)

1. The status or development of handicraft sector in Sabah (the important of handicraft sector to Sabah people)
2. Current issues regarding handicraft development in Sabah (handicraft and local people in rural Sabah)

Section 3: Handicraft Production (tailored to existing knowledge)

1. Producer profile - types of producer currently existing in Sabah (prompt: commercial/non-commercial and formal or informal handicraft producer)
2. Nature of organization of production (raw materials sourcing, what production methods, ownership, employees?)
3. Nature of organization of distribution (what are the distribution channels? How are products sold?)
4. Market and customers (Who are the main types of customers/buyers?)
5. Rate of business start-ups/entrants, rates of failure/exits

Section 4: Handicraft Producers (tailored to agency remit)

1. What do you think of the factors that encourage a person to start a business? (how does the process of commercialization tend to happen?) - focus on the transition from non-commercialized/part-time business into more commercialized/formal business…then focus on the handicraft business take up by local people in rural areas (prompt list: internal and external factors of business start-up: e.g: driven by agencies/buyers or the producers themselves?)
2. What do you think are the barriers in starting a business or cause them to fail quickly? (Prompts: why small business fail). How do you think this can be overcome?
3. Example(s) of case(s) of producers/groups that have commercialized successfully.

Section 5: Government Support

1. Views on current support and initiatives by government/ non-government agencies.
2. Future needs and challenges (plans for improvement, constraints)

To end

- Any documents/reports/data that you could show which are relevant to the population of handicraft producers, the types of handicraft business in Sabah, the current statistics that are relevant for this study?
- Advice on other important people to talk to? (the front liners or other staff in the agency who could provide firsthand knowledge about the rural people and handicraft business or entrepreneurship.
- Suggestion for approaching successful handicraft producers and informal producers in rural Sabah.
- Thanks the interviewee.

The interview tool typically contains an outlined script and list of open-ended questions relevant to the topic to be discussed (Bryman, 2004). The discussion guide used in this study began with the most factual and simple to answer questions, then questions that asked informants' opinions and perceptions, and finally questions that asked for general recommendations. The discussion guide consisted of five main sections. Section 1 discussed information about the role of the informant's agency and programs related to handicraft production among local people in rural Sabah. Section 2 gathered relevant information tailored to the agency's remit, for example information on the current status of the handicraft sector as a whole, including handicraft production in rural areas. Section 3 gathered insights into the present types of handicraft producers in Sabah as well as the management of handicraft making activities among local people in rural areas. Section 4 asked for the interviewees' perceptions, as experts, about why producers start a business and the barriers or problems they face in pursuing their business, especially among local people in rural areas. Finally, Section 5 asked interviewees, as experts, for their views on the most useful and helpful support or policies related to handicraft production among local people in rural Sabah. At the end of the interview, interviewees were encouraged to have a general discussion on the impact of current government policies or support for handicraft producers in Sabah, and the future plan for improvements.

Gauging from the mission and objectives of these agencies, the researcher believed that the views and insights of all interviewees were significant for this research since they had first hand information about handicraft production and local people in rural Sabah. Nevertheless, they had different degrees of role and responsibility for the handicraft sector in Sabah. Therefore, Sections 4 and 5 of the discussion guide were modified according to the specific interviewees' remits. For example, the topics discussed with the Ministry of Rural Development and Entrepreneurship were more focused on the development of entrepreneurs among local people generally in rural Sabah, not merely handicraft producers. Whereas for the questions addressed to the MHDC, the discussion was more focused on the handicraft sector in Sabah.

4.4.3 Execution of Key Informant Interviews

Since the key informants involved in this study were policy makers or officers who were always busy with their daily work, it was important to make appointments for the interviews. As for the formality procedure, the researcher first contacted informants' secretaries or personal assistants in advance. In addition, the informants were also contacted via email, using addresses gathered from their agency's website. The purpose of the first step approach was to ask their permission and to obtain informed consent to be involved in the study. Ritchie and Lewis (2003) mention it is important for an interviewer to provide respondents with information about the purpose of the study, the funder, the researcher, how the data will be used and what participation will require from them. Therefore, a cover letter stating the purposes of the interview together with the key topics to be discussed was also provided to the key informants prior to interview.

Appointments for the interviews were made based on the availability of informants for the interview session. Once the venue, time and date for the interview were agreed, a cover letter was sent to each informant. The researcher then followed-up with a gentle reminder to the interviewee about the date of the interview. Most of the interviews were conducted at interviewees' workplaces. The interviews were conducted face-to-face in the Malay Language. Face-to-face interviews provide the researcher with free-exchange of ideas with interviewees and it allows discussion for more complex questions and detailed responses (Ritchie & Lewis, 2003). The interviews were conducted by the researcher, over varying lengths of time, dependant on the types of information needed as well as the level of knowledge and experience of the interviewee. For example, the time involved during the interview with the MHDC was considerably longer than with the Sabah Tourism Board because the MHDC informant possessed knowledge and experience to talk more about handicraft production in Sabah including the government initiatives and the nature of handicraft producers in Sabah, whereas the Sabah Tourism Board informant had little role in handicraft production, but more in the promotion of various local tourism-related products.

The purpose of the discussion guide was only to provide an outline or direction for the interviews towards. The researcher allowed free-flowing conversation, i.e.

allowed the interviewees to share their views and perspectives on related issues important to this research. In some instances, prompts and probes were also used in order to clarify informants' comments and get detailed information on their views. Ritchie and Lewis (2003) explained that a prompt or follow-up question to an interviewee could involve the use of quotes or vignettes, photographs, images or objects to encourage him/her to provide ideas or opinions about something. For example, for the key informant interviews, in order to gain perceptions on handicraft production in Sabah, the interview was started with a preamble of a newspaper cutting from the New Sabah Times, entitled "handicraft industry has potential to be successful SME sector". By doing this, the discussions with the interviewees were started from a general issue about the handicraft sector in Sabah, and narrowed down to perspectives on involvement of local people in handicraft production. At the same time, in order to obtain deep information on each of the topics discussed, probing was also employed, especially by asking questions like how and why.

Note taking and digital recording were also employed to record the face-to-face interview responses. It was planned that during the interviews, digital recording should be used to document the conversation, as active note taking might disrupt the conversation. In addition, field notes were completed by the researcher right after each interview in order to identify key points or information.

In relation to the compilation and analysis of data, a manual process was employed since the sample size was small, i.e. only five key informants, and the purpose of the interviews was to fill gaps in knowledge based on secondary data. Every conversation recorded was transcribed into a word processing document based on the audio file retrieved from digital voice recorder. The data were organized according to themes or categories that were developed based on the prescribed research objectives. For example, the interviewee's perceptions about why some handicraft producers favoured home-based production were included under the theme of perceived advantages or disadvantages of home-based and workshop-based production. Then, several categories under each theme were developed as the researcher read through the data thoroughly. For example, interviewees believed that one of the reasons for low involvement of local handicraft producers in commercialised production is a lack of knowledge in accounting, management and

marketing. Therefore, under the theme of 'perceived advantages and disadvantages of commercialised production', lack of knowledge and skill was added as one of the categories under the theme. The development of categories and themes emerged throughout the transcription and analysis process. In addition, the statistical reports and supporting documents on handicraft production in Sabah, which were provided by all informants, for example, handicraft census by MHDC (2008) were also processed and analysed to be translated into a meaningful picture about the population and types of handicraft producers in Sabah.

4.4.4 Critical Reflections on Key Informant Interviews

For the exploratory phase of this study, key informant interviews served as a suitable way to gather relevant information needed to address the knowledge gaps based on secondary data. The interviews provided depth of information from people of various relevant agencies, with diverse backgrounds and opinions. With different views and insights, more information about the types of handicraft producers in Sabah was gathered. Besides, key informant interviews also allowed a smooth progress for selection of additional key informants through recommendations and suggestions of the right key people and organisations to be interviewed. This helped ease the appropriate selection of key informants for the study.

Nevertheless, in relating to sufficiency and accuracy of data, it can be said that for the best result, the selection of key informants should not be made merely among the policy makers or senior management of an organisation, like the directors or managers of a department. It is useful to also include the assistant managers or the middle officers who can provide firsthand information because they normally deal with the community directly. For example, it was mentioned by the Director of the MHDC during the interview that his post is rotated; therefore he was new to Sabah and knew little about the nature of handicraft production in Sabah, though he provided the researcher with relevant information based on his general experience in the handicraft sector in Malaysia. He mentioned his officer as an appropriate person to be interviewed because the officer undertook regular fieldwork to check on what is going on among handicraft producers around Sabah. The researcher was unable to interview the officer as he was very busy with his work in other districts.

Nevertheless, a short informal conversation with the officer contributed ideas about appropriate practices for conducting a survey with handicraft producers in the later phase of fieldwork, especially in relation to practical and ethical aspects, for instance, how to approach them, which districts to go to, which suitable language to use, as well as the most suitable token of appreciation for them.

4.5 Design of the In-Depth Interviews with Handicraft Producers

4.5.1 Principles of In-Depth Interviewing Sampling and Recruitment

In-depth interviews normally involve small sample sizes, for example, Shabbir and Gregorio (1996) conducted in-depth interviews with 33 entrepreneurs, and Walker and Brown (2004) involved 11 participants in their in-depth interviews. The size of sample is dependent on the saturation point where concepts have been fully explored and no new insights are being generated from the next interview (Bryman, 2004; Walker & Brown, 2004). Miles and Huberman (1994) explain that the member of respondents for in-depth interviews is usually not wholly pre-specified, but evolves once fieldwork begins. Furthermore, the main objective of this data gathering activity is to study in-depth participants' experiences, processes and perceptions, rather than seeking statistical significance (Jones, 1988; Miles & Huberman, 1994).

In terms of the procedure for selecting a sample for in-depth interviews, different researchers use different procedures, depending on the objectives of the research. Miles and Huberman (1994) assert that qualitative sampling tend to be purposive, rather than random. For example, Shabbir and Gregorio (1996) study motivations for business start-up among women; therefore, they select women respondents only from the list of the participants of an entrepreneurship development program. Walker and Brown (2004) conduct research on small business owners' motivations to start-up, therefore, they recruit respondents from a variety of business industries and equally apportion male and female respondents. In some instances, some researchers select samples that are accessible and convenient to be approached, for example selecting a sample in a particular area because of the special features the area holds (Ritchie & Lewis, 2003). Ritchie and Lewis (2003) explain that although convenience sampling is not statistically representative, the sampling technique is still appropriate because

it allows detailed investigation of social processes, rather than just focusing on the quantity of the sample. Notwithstanding, for the purpose of representativeness to population, it is possible for a researcher to set primary characteristics as bases for recruiting samples, which are underpinned by prescribed research questions (Shabbir & Gregorio, 1996; Ritchie & Lewis, 2003). Miles and Huberman (1994) list a range of sampling strategies for qualitative studies, including 'criterion', i.e. select a sample that meet some criteria in order to ensure the quality of the sample. Overall, this literature on appropriate practice in sample selection was used as a guideline in selecting the sample for the in-depth interviews in the current study.

Undeniably, the researcher's main concern before executing in-depth interviews is about how to reach or approach the interviewees to get them involved in a study. Bryman (2004) mentions the use of informants to access a social setting that the researcher is interested in studying. The use of informants in a study is helpful in terms of directing and suggesting the right people to be approached as the sample in a study. For example, Kodhitawakku and Rosa (2002) used key informants, i.e. local people in the village who possessed a thorough knowledge of all households they studied, and Berma (2001) used a village headman as the entry point to the village, who facilitated her approach to respondents' homes and with getting them to participate in her study. Holmes and Zimmer (1994), who studied the grower vs. non-grower type of small business owner, accessed their respondents through recommendations from business advisors working for the Small Business Corporation.

4.5.2 In-Depth Interviewing Sampling and Recruitment for the Current Study

Initially, the sample for second phase of fieldwork (in-depth interviews) was planned for not more than 20 handicraft producers in Kota Belud district. In-depth interviews are human-intensive and time consuming, thus, a small sample befitting the research objectives was selected. Besides, it was believed that large-scale interviews could be problematic if the large quantities of information collected were irrelevant to the research objectives. Conveniently, Kota Belud was chosen as the area for the study because most handicraft producers in Sabah are based in this district.

The sample for the in-depth interviews was purposely selected from the population based on primary characteristics befitting the research objectives. Some interviewees were drawn from the MHDC census (2008), others through a snowballing technique, based upon suggestions from key informant interviewees (the chief trainer of a handicraft incubator and the MHDC officials) as well as from other handicraft producers in the villages. Five main criteria were assumed likely to provide different responses on the topic of the commercialisation process among handicraft producers: (1) premises location (home-based vs. workshop-based), (2) status (full-time vs. part-time), (3) gender (4) sales revenue (low vs. high) and (5) attendance in an incubator. These primary criteria were clearly stated in the list of handicraft producers in the census report (MHDC, 2008), thus were used as bases for selecting interviewees for this fieldwork. Sixteen respondents were interviewed in total, representing different demographic backgrounds (proportion of male and female, education level, marital status, employment, training in handicraft incubator), status (full-time/part-time), premises (domestic/workshop-based) and high and low sales turnover. In particular, given the research objectives, it was important that different levels of commercialisation (home-based/workshop based and part-time/full-time production) were represented among interviewees, to provide information on how each type of handicraft producer operates and survives in their production.

4.5.3 Principles of Discussion Guide Development

In this study, a discussion guide was prepared to guide the interview in order to make sure all research objectives were addressed and to avoid the conversation from turning towards more general discussion. However, throughout the interviews, it was crucial for the interviewer to allow participants to provide their story and views about their world in their own ways (Bryman, 2004). In a nutshell, the development of a discussion guide is not only driven by prescribed research questions, but also the perspectives of interviewees. Bryman (2004) mentioned in-depth interviews involve semi-structured interviews, guided by a discussion guide which contains topics to be covered but these depend on the participants' ways of replying. During the interview, the interviewer can start with a brief set of prompt questions, instead of

long questions, and let the participants respond freely, while the interviewer just responds to points that seem important to be followed up. The development of a discussion guide in this study was informed by some basic elements of discussion guide design listed by Bryman (2004), namely, (i) prepare a discussion guide on the topic areas to allow smooth conversation, (ii) ask or record the 'facesheet' information first so that the interviewer can ask appropriate questions that suit respondents' backgrounds (iii) formulate interview questions based on research questions, but not too specifically, (iv) use language that is comprehensible and relevant to the participants, and (v) do not ask leading questions.

4.5.4 Discussion Guide Development for the Current Study

Face-to-face unstructured interviews were conducted at the interviewees' preferred place (at their house or in their premises) and time. The interviews were in the form of free-flow conversations and were guided by an interview guide which contained an outlined script and list of open-ended questions relevant to the topics to be discussed. These related to respondents' experiences and history of their businesses, operation and management of their businesses, what they thought of factors that encouraged or inhibited their businesses' start-up and growth, motives for commercialising handicraft production (or not), and perceptions of their businesses' performance including problems or challenges they faced. The discussion started with the most factual and easy to answer questions first, for example the demographic profiles and business profiles, then, questions that asked about interviewees' experiences and operation of their businesses. Finally, the conversations were ended with questions that asked for opinions and perceptions on related information. Before starting the interviews, the interviewer asked permission for recording and provided assurances of anonymity for the information given by the interviewees. Apart from understanding the influence of their general background in the launching and the running of their enterprises, interviewees were also asked to provide their opinions on what they thought were the factors that supported or hindered growth of their enterprises. Once every interview was finished, the interviewees were given a souvenir as a token of appreciation for their cooperation. After each interview, the researcher wrote up field notes on important issues gleaned

from the interview, as well as any questions or topics that were overlooked so that necessary steps for improvement could be made for the next interview. Figure 4.2 shows the discussion guide used during the interviews.

Figure 4.2: *In-depth Interviews Discussion Guide (n=16)*

1. Introduction
   - Ask permission to conduct the interview and explain why and who I am
   - Record 'facesheet' questions (name, age, gender, previous job, number of years in handicraft production)

2. Profile of Producers – demographics, experience

3. Background to business
   - History of their business, when did it start? Whose idea was it to start? How was it started?
   - Operation and management of production -- mode of operation (full-time/part-time, government assisted/independent managed workshop), no of workers, how do they get the resources/ start-up capital.
   - Current progress/performance – have there been any changes over time in production (sales, new market, new product, no of workers, new place/building or less activities compares to start?), sources of technical advice (own knowledge/friends/community member/NGOs/government agencies?)

4. Reasons/Motives for commercializing handicrafts (factors that supported or hindered business growth/survival, not only for starting a business, but also in operating the business), e.g. to support family, be own boss, to earn more money, to achieve higher social status, to continue the family business, had good training, had contacts to start this business, etc.

5. Perceptions and attitude towards business
   - Benefits/advantages or disadvantages of workshop-based/home-based production.
   - Problems/challenges encountered when doing business – availability of raw materials, financial, technology, market opportunities, competition, taxation, labour problem, assistance from related supporting agencies for business development, etc.

6. To end
   - General discussion of the impact of the handicraft development by government agencies, e.g. MHDC, KPLB, or non-government agencies.
   - Is there anything else they would like to tell us? Do they have any questions for us?

4.5.5 Principles of Execution of In-Depth Interviews

In-depth interviews involve gathering of data about life history (Thompson, 2000), therefore, face-to-face interaction between the researcher and the interviewee is important in order to allow the researcher to immerse in the actual social setting of the phenomenon under investigation (Blaikie, 2000). In this study, the researcher personally went to interviewee's house or premise for the interviews. The strength of this approach is it allow researcher to see personally how and where interviewees make handicrafts in their place. Ritchie and Lewis (2003) assert interview data need to be captured in its natural form, i.e. in interviewee's own language or way of understanding something. So, interviews need to be recorded since note taking by the researcher is insufficient as it would change the form of data.

Ritchie and Lewis (2003) assert although in-depth interviews are generally based on topics listed in the interview guide, the structure should be sufficiently flexible, i.e. topics should suit to the interviewee's identity. For example, in this study, the researcher should be alert to different responses from different types of handicraft producers, e.g. a high income interviewee might be interested to talk about their successful business, so the question might changed to what makes them survive and succeed. Meanwhile, for the low income interviewee who might respond in a modest way about their business, the researcher might ask why they chose to be at the current stage of production or what hinders them to move to a greater level of production. Ritchie and Lewis (2003) mention the researcher should be responsive, i.e. all responses should be fully probed and explored differently based on the interviewee's profile. For example, in order to generate in-depth information from the interviewee, the researcher can ask for their suggestion or opinions about a particular topic discussed, even allowing them to propose solutions for problems raised during the interview.

The researcher should also establish a good relationship with the interviewee during the interview in order to encourage active responses. Creating the right rapport is very important for in-depth interviews in order to encourage active responses (Ritchie & Lewis, 2003). Thompson (2000) suggests the researcher should demonstrate interest and respect as well as being able to show understanding and empathy with the interviewee's response. It is important to ensure in-depth

interviews are conducted in an interactive manner, i.e. the researcher should start the conversation with general questions, in nature to encourage further conversation (Ritchie & Lewis, 2003). Taking into consideration all of these features of in-depth interviews, the following section presents the execution of in-depth interviews for the current study.

4.5.6 Execution of In-Depth Interviews for the Current Study

This second phase of fieldwork was carried out over a period of nine weeks in Kota Belud, Sabah, through face-to-face in-depth interviews with handicraft producers, which mostly were conducted in the interviewees' houses and/or premises. Throughout the fieldwork, the researcher drove to Kota Belud from Kota Kinabalu for each interview, accompanied by a friend who knew the areas well. It was one hour and 30 minutes journey from Kota Kinabalu to Kota Belud town. The researcher was stationed in Kota Belud throughout the fieldwork and went back to Kota Kinabalu once for two weeks to review the data gathered. The researcher started the fieldwork by contacting the chief of the MHDC handicraft incubator in Kota Belud, Mrs.Tiamas. She was one of the informants during the first phase fieldwork (key-informant interviews). During that phase, she provided information on the background of the handicraft incubator and the role it plays in developing young handicraft entrepreneurs in Sabah. Therefore, since she possessed thorough knowledge and experience about handicraft producers in Kota Belud, the researcher asked for her assistance to get contact with the target interviewees. The researcher met her in the incubator and discussed about this. Since she knew well some of the *dastar* weavers (traditional textile) in Kota Belud, the researcher asked her suggestion for names of the handicraft producers in Kota Belud, including the workshop-based producers and the domestic producers. As a result, she provided the researcher with eight names: six home-based producers, and two workshop-based producers in Kota Belud. It was found that the names provided by Mrs Tiamas were also listed in the MHDC census, thus it was quite easy for the researcher to validate their contact details and some business background as stated in the census list. In fact, the researcher managed to interview one of the trainees in the MHDC incubator as suggested by Mrs Tiamas. The researcher then made phone calls to all of the

selected producers and introduced herself as a student conducting research, and allowed the respondents to decide their own date and time for the interview. It was quite difficult for the researcher to understand the areas that the respondents lived in as the researcher was not familiar with all the village areas in Kota Belud. Nevertheless, the researcher was assisted by three people (all office colleagues), Mrs Tini, Mr Humin and Miss Yati who had already been to Kota Belud for their research. These people guided and accompanied the researcher to get to the right areas. The interviews took place in two villages named Kampung Merabau and Kampung Rampayan Laut.

In order to ensure the criteria of full-time/part-time and workshop/home-based respondents were covered in the interviews, the researcher referred back to the MHDC census list to select the right respondents to be interviewed. The researcher managed to get additional full-time and part-time workshop-based producers to be interviewed. In addition, the researcher also contacted a man named Boy, who was recommended by the Sabah Rural Development Ministry (KPLB) as the middleman who always helped KPLB in dealing with metal-based handicraft producers in Kota Belud. Boy was a full-time *parang* (machete) maker but at the time he did not produce handicrafts. He was the buyer for metal-based handicraft products, especially *parang* and he was doing a full-time job as a technician in town. Boy suggested to the researcher two further names and addresses of workshop-based producers and home-based producers, respectively.

From one of these respondents the researcher was told that there would be a handicraft exhibition in town, i.e. the Batik and Craft Exhibition held in the One Borneo Shopping Mall, in Kota Kinabalu, for three days. The researcher saw this exhibition as a good opportunity and quite convenient to search for additional respondents, especially among the full-time producers. Therefore, the researcher walked in to the exhibition and found most producers were textile-based crafts/textile-weavers, and a few of them other types of producer. Two respondents were approached in the exhibition, where the researcher asked them whether they willing to be interviewed. Once permission was gathered, appointment for the interview was set. Two respondents were interviewed on the next day. They preferred to be interviewed in the morning as that was outside their peak hour during

the exhibition. Overall, 16 handicraft producers, were interviewed, ten were home-based producers, and six were workshop-based producers.

All interviews were conducted in free-flowing conservations, but still based on the topics outlined in the discussion guide. The researcher let the interviewees know that the objective of the study was to learn about how people got involved in handicraft production based on their perspectives, experiences, beliefs and histories. For example, the researcher asked the interviewees to give their opinions on why some producers favoured producing handicrafts full-time/workshop-based and why some did not, which might have been influenced by their experiences and beliefs. In addition, to ensure all needed information was covered, the researcher drafted a summary sheet right after each interview, so that the researcher could know the information that was overlooked and needed to be covered in the next interviews. All interviews were conducted in the Malay Language. Note taking and digital recording were employed to record the interview responses and photographs were also taken. Once each interview was finished, the researcher thanked the interviewee for their cooperation and gave them a small souvenir as token of appreciation.

4.5.7 Principles of Analysis of In-Depth Interview Data

The process of analysis of in-depth interview data requires extensive treatment due to the qualitative features of the data compared to the quantitative method. Bryman (2004) recommends that the researcher should analyse the respondents' summary sheets in order to get some insight into the demographic details of the respondents and the main issues which emerged from each interview. The process of analysis of data from in-depth interviews involves coding information and gathering these into several codes. Bryman (2004) suggests a development of codes can be guided by a conceptual framework developed prior to fieldwork. A conceptual framework explains, either graphically or in a narrative form, the main things to be studied, for example the key factors, constructs or variables (Miles and Huberman, 1994). Therefore, a conceptual framework can produce a 'start list' of codes, for examples in this study the research objectives related to understanding of handicraft producers' 'motivations', 'personality characteristics', 'personal skills' and 'contexts' could be used to guide the development of codes. Nevertheless, it is

important to bear in mind that codes may change and develop as field experience continues. Codes are developed based on all incidents or events emerging from the data which then can be classified into categories under each code. Miles and Huberman (1994) recommend that codes are structured and arranged in order to ease the process of analysis of the data. They suggest that once all codes and categories have been arranged, the researcher can draw a pattern of codes in a network form, like a blueprint, which helps the researcher to see further which factors are influencing the event under investigation, and also acts as a prelude to further analysis. The explanation of the process of analysing in-depth interviews data for the current study is discussed in the following section.

4.5.8 Analysis of In-Depth Interview Data for the Current Study

Every digitally recorded interview in the current study was transcribed and typed up into a word processing document to be analysed. The transcribing process was done in the Malay Language which was also used during the interviews with the respondents. The ideas, interests and views given by interviewees were sorted into categories that were developed prior to the interviews. These were based on concepts and theories from the literature related to the study. The process of analysing the data was guided by an initial conceptual framework (Ritchie & Lewis, 2003) about the main things to be investigated in this study. Figure 4.3 shows the initial conceptual framework for the investigation relating to the process of commercialisation among handicraft producers in Sabah, which was useful as a guide for the coding process. The process of coding the data into categories was done directly from the data during and after the transcribing process. Similar data were labelled under similar codes, and were allocated under relevant categories.

Once audio conversations from the in-depth interviews were transcribed into full testimony in a Word document version, guided by the initial conceptual framework, passages or quotes relevant to prescribed themes were drawn from the interviewees' testimonies to be sorted under appropriate codes. Each code was put under pre-developed categories according to its suitability to be in a theme, for example, for the theme of 'how do interviewees start-up their enterprises?', testimonies which mentioned "passion for handicraft" and "self-reliance" were coded under categories

of internal or personal factors, while testimonies which mentioned "government support" and "supportive attitude from family" were coded under the category of external factors. Several categories were pre-developed beforehand based on preliminary fieldwork as well as from the literature. Then, each code together with the number of the interviewees was coded into a thematic table for comparative analysis purposes, to see the pattern or associations of the data (See Appendix 4.1: Codes and Categories Derived from In-depth Interviews).

Analysis of data was then written up in text form based on underlying research objectives, supported by verbatim quotes from interviewees' testimonies. Several propositions about factors influencing commercialisation, performance and types of handicraft producers were developed based on qualitative data analysed. These propositions guided the development of the questionnaire for the survey. Apart from the development of lists of codes and categories in a table, the researcher also developed two diagrams summarising the emergent factors driving the events under study, i.e. the level of commercialisation and performance, based on two different types of respondent, home-based and workshop-based. Shabbir and Gregorio (1996) analysed their two types of respondent (starters and non-starters of small business) separately, and then compared them in terms of factors that were likely to influence start-up. This framework allowed the researcher to have some hindsight about what influenced interviewees' decision to go (or not) to greater level of commercialisation. Figures 4.4(a) and 4.4(b) present the schematic diagrams summarising the interview findings relating to factors that stimulate/inhibit a greater level of commercialisation in handicraft production, among domestic producers and workshop producers, respectively.

Figure 4.3: *Initial Conceptual Framework for the Factors Influencing the Process of Commercialisation among Handicraft Producers.*

Topic: Factors influencing the commercialisation process (when making decision to take-up a business as well as to continue growing the business)

1. Internal factors
   - Personality (entrepreneurial values and attitudes that emphasise initiatives and response toward business formation)
     - Locus of control (who controls their life events, including success or failure, internal (e.g: themselves) or external (e.g: other people, fate or luck, etc)
     - Need for achievement (self-confidence to achieve a particular goal, high achievers/low achievers)
     - Risk-taking propensity (whether the person has a tendency to take risks?, concerns over financing the business, the future rewards/outcomes (fail/success)? Concerns about the time and commitment needed? concerns about institutions' ability to provide them with resources/ assistance.
   - Motives
     - Financial (anything for money: income from sales growth, to support family, for better standard of living, etc.)
     - Non-financial (anything other than for money: personal satisfaction, life-style, independence, culture preservation, family tradition, etc)
   - Skills and knowledge
     - Education level (formal education: schools, universities, training institutions, etc)
     - Experience (from previous work, skills inherited from family,

2. Contextual factors
   - Networks
     - Family (inherited family business, relatives, etc)
     - Institutions (government agencies, private agencies, community programs, etc)
     - Friends (friends who search for a partner in business)
     - Traders (middlemen who ensure the sales of the products)
   - Resources
     - Capital (finance, land)
     - Labour/helpers (people who can help in producing/managing business)
     - Raw materials (natural resources, supplies, machines)
     - Technical training (management skills)

Figure 4.4(a): *Factors which Stimulate/Inhibit a Greater Level of Commercialisation in Handicraft Production among Domestic Producers*

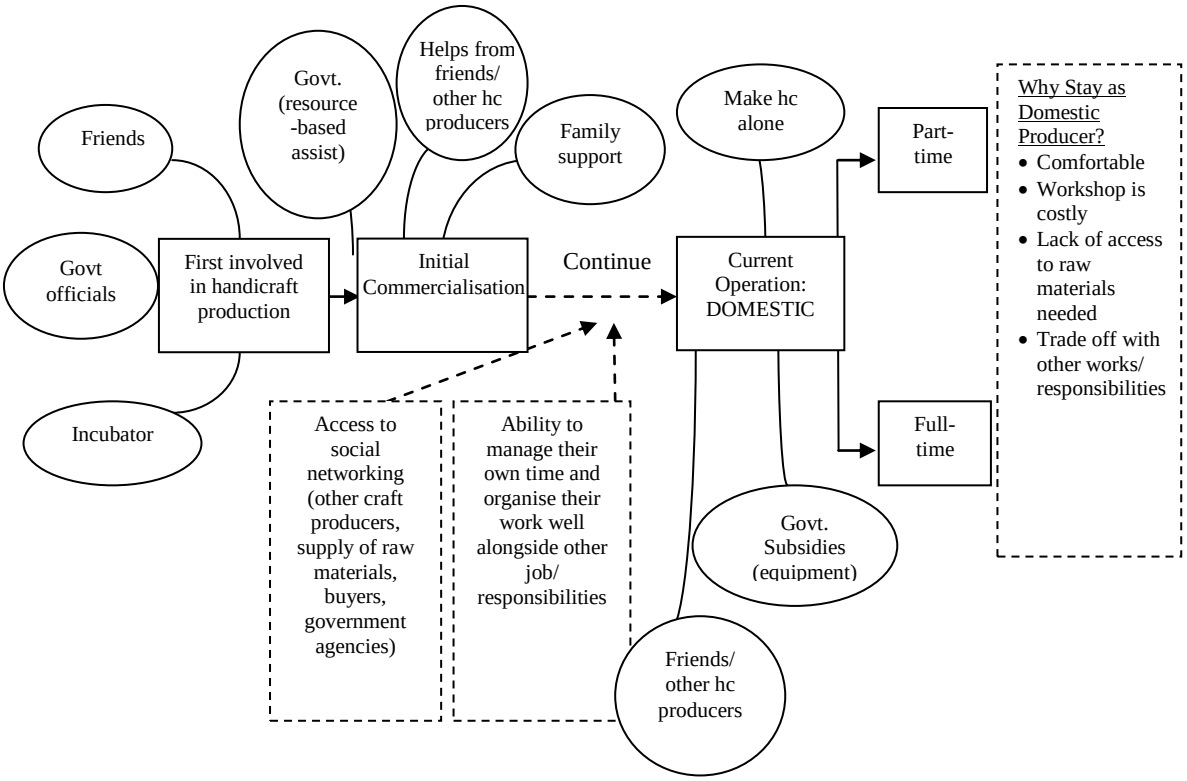
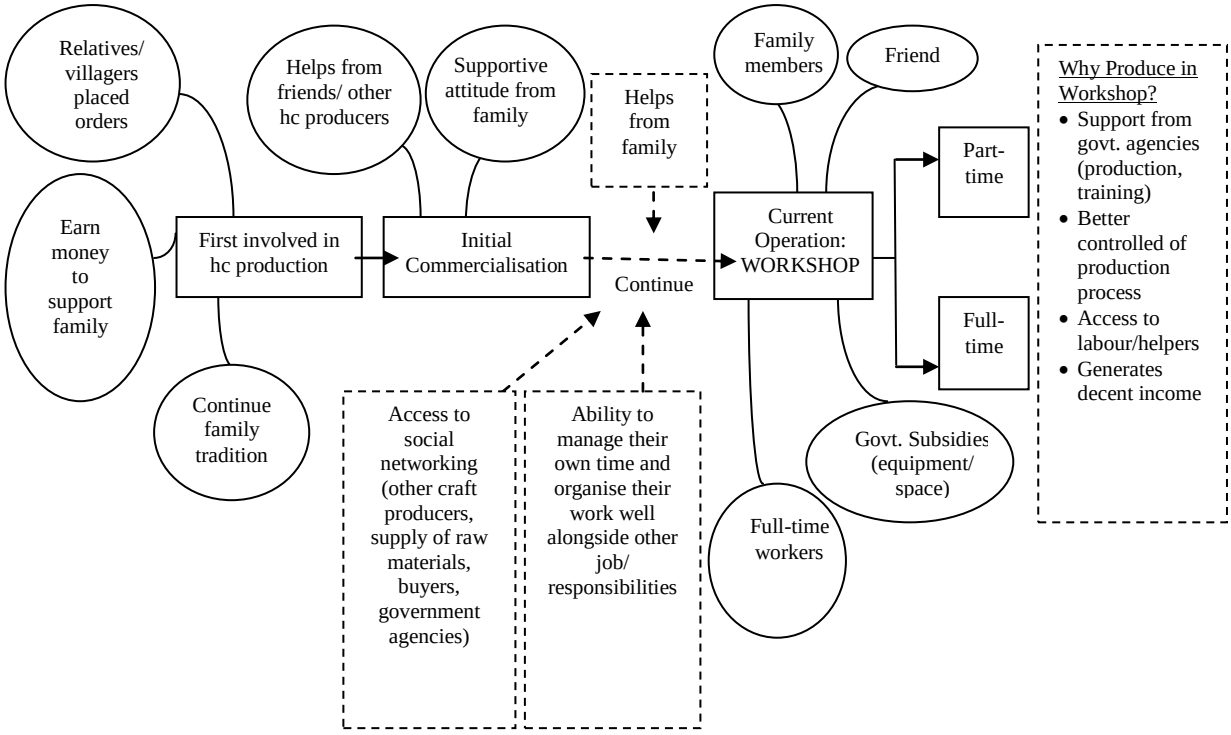


Figure 4.4(b): *Factors which Stimulate/Inhibit a Greater Level of Commercialisation in Handicraft Production among Workshop Producers*



4.5.9 Critical Reflections on In-Depth Interviewing for the Current Study

In terms of approaching potential interviewees, it was found that the use of key informants as a method to access respondents was helpful for the researcher, as it not only eased the process of approaching the respondents, but also informants' knowledge of handicraft producers in their areas served to validate selection of the right respondents among handicraft producers based on predefined criteria. In relation to obtaining cooperation and consent from the potential interviewees the researcher found that being honest and frank with the respondents was the best approach to get them to participate in the interviews, for example by informing them that the interview was for a research purpose, i.e. to learn more about why people make handicrafts, so that the knowledge gained from them could contribute to the development of the handicraft sector in Sabah.

It was found that in-depth interviews required the researcher to be actively involved in the conversations. It required patience from the interviewer, especially when some interviewees took a long time, for example mostly when conducting interviews with successful or high performing producers, i.e. full-time, workshop-based, who were very excited about sharing their successful stories. In addition, some producers tended to provide information less relevant to the study, for example they talked about the handicraft itself, rather than their experience of starting and growing their production. Some interviewees had been involved in previous research conducted by university students, relating to culture and arts, therefore, they were somewhat keen to share the meaning of a handicraft to their native area and sometimes the researcher needed to bring them back to the actual topics to be studied. The researcher also encountered some challenges in order to glean faithful answers from the interviewees, especially in terms of their income. Some interviewees were very keen to disclose their sales revenues, and some were quite modest about expressing this, despite the fact they were actually performing quite well. Nevertheless, the researcher validated the profile information relating to each interviewee, including their sales income, by cross-referencing the information given on MHDC census list.

There were also some challenges and limitations in handling the in-depth interview data. In terms of data analysis, the process of analysing the in-depth

interview data was very time consuming since it was done using manual coding. Also, many new unexpected factors/variables emerged from the interviews, which the researcher found quite difficult to classify into appropriate categories. For example, some interviewees mentioned they make use of available space in their house or near their house area for handicraft production, and some mentioned they used their own savings to start the business. The researcher initially regarded this as attitude of being independent, creative and resourceful. However, these attitudes were not pre-defined as one of the factors/variables under any category in the initial conceptual framework, in which only locus of control, need for achievement and risk taking propensity were pre-defined as the possible factors under personality category. After thorough reviews of literature, the researcher had an impression that these attitudes can be regarded as attitude of self-reliance which was then added under the personality factor category.

Overall, the in-depth interviews conducted in this study were quite exploratory in nature and the development of propositions limited to the evidence provided by 16 handicraft producers. Nevertheless, the data provided considerable detail which assisted in developing initial profiles of full-time/part-time, workshop-based/home-based and high performing and low performing handicraft producers. In relation to factors that might explain a handicraft producers' move to greater commercialisation, the in-depth interview data, together with the literature review, generated a list of person-related factors and contextual factors likely to influence producers' decisions towards their levels of commercialisation and performance. Table 4.3 presents these sets of factors. Each set was then taken forward for further survey research.

Table 4.3: Sets of Person-related and External Factors Observed from In-Depth Interviews and Literature

	Relevant factors mentioned in literature	Observation from in-depth interviews	Proposed sets of factors for further investigation
	Person related factors		
1.	Demographic -age, education, family background, living condition (e.g. Kodithuwakku & Rosa, 2002; Davidson &Honig, 2003)	- more part-time domestic producers were female, while more men were found to be involved in full-time workshop production. - more married women with dependants were found to be involved in part-time production, while more full-time workshop were women married with no dependents	• Age • Gender • Education • Type of residence • Family status
2.	Previous business background -parents owning a business, previous working experience, incubator attendance (e.g. Bhagavatula, et, al 2010; Kalantaridis & Bika, 2006)	- some interviewees mentioned that they continued to be involved in handicraft production precisely after they attended course at handicraft incubator - some interviewees tended to produce handicrafts part-time because they were currently having other income possibilities like farming or permanent job.	• Attendance at incubator • Parental entrepreneurship • Current main source of income • Previous income prior to handicraft production
3.	Personality characteristics -self-confidence, self-reliance, perseverance, achievement orientation (e.g. McClelland, 1987; Lee & Tsang, 2001; Baum & Locke, 2004)	- some mentioned about believe/doubt in their own ability to complete a task - some mentioned they prefer to do things on their own than rely on other people - some producers perceived they would not give up when they face challenges (critiques, lack of resources, etc) - some mentioned about making plan and ensure high quality works.	• Self-confidence • Self-reliance • Perseverance • Achievement orientation
4.	Personal Skills -social networking, management and marketing skill (e.g. Lee & Tsang, 2001; Krueger, et al, 2000; West & Noel, 2009)	- some interviewees seemed to take up organizing and planning skills, develop networking, possess basic costing though no formal accounting, and possess handicraft making skill (some used traditional, while some used modern machines).	• Technical/production skill • Organizing skill • Networking skill • Accounting skill
5.	Motivations - Financial and non-financial rewards - (e.g. Cromie, 1987; Naffziger, et al, 1994; Baum & Locke, 2004, Walker & Brown, 2004)	- some mentioned handicraft supplements their income - some mentioned they make handicraft to earn maximum income and to have a better living - some mentioned they always love and enjoy to make handicraft - some mentioned they make handicraft not solely for sale, but to preserve their heritage - some mentioned family and friends motivate and advise them to become handicraft producers - some mentioned they make handicraft at home on their own because like to be independent.	• Income supplementation • Income maximization • Passion for handicraft • Cultural preservation • Family and friends • Need for independence

	Relevant factors mentioned in literature	Observation from in-depth interviews	Proposed sets of factors for further investigation
		External Factors	
6.	Support context Friends and family, government support, financial assistance, presence of technical skilled labour, access to raw materials, sales opportunities, flexibility of time (e.g. Korunka, et al, 2003; Lee & Tsang, 2001; Baum & Locke, 2004; Frank, et al, 2007).	- some perceived having family and friends in their production eased their production - it was found that government support was mentioned by many of the domestic part-time producers during initial commercialization - some perceived difficulties in getting financial support during initial commercialization. - some mentioned about difficulties of getting young skilled workers for their production, and runaway workers. - need for machinery and raw materials were widely mentioned by interviewees - some mentioned various ways for marketing their product, i.e. trade fares, events, exhibition, middleman, weekly market. - some producers, especially married women mentioned producing handicraft at home allows them to enjoy their own time, and is more flexible compare to workshop production.	• Emotional & technical support from family and friends • Government support • Access to finance • Access to reliable workers • Access to raw materials • Access to sales opportunities • Flexibility of time for production

4.6 Design of the Survey of Handicraft Producers

4.6.1 Principles of Survey Sampling

Good quantitative research practice has been always strongly associated with random or probability sampling in order to gain representativeness of a sample to a population, which later contributes to the generalisability of findings. For example, Paige and Littrell (2002) who studied the factors influencing success among craft retailers, used a systematic sampling approach for their survey sampling, i.e. a sample of 1,000 craft retailers were selected from a list of 2,021 craft retailers listed in the Chambers of Commerce and Craft Associations, with proportional representativeness of nine states in the southern highlands of the USA.

In actual research practice, probability sampling might not always be preferred, especially when it is perceived as difficult due to limited resources available to the researcher, for example time and cost constraints. However, the avoidance of probability sampling is not only based on limited resources, in fact, non-probability sampling is considered an appropriate approach if it is reasonable in terms of its purpose (Bryman, 2004). Such considerations of using non-probability sampling as an appropriate approach are parallel to the concept of 'interpretivism', i.e. understanding the social world through a logical research procedure. Although non-probability sampling can be a source of bias due to human judgement in selecting the

samples, it is appropriate when a sampling frame is not available or inadequate for probability sampling (Bryman, 2004).

In terms of sample size, it is always expected that larger sample sizes increase the precision of a sample. As Bryman (2004) explains, larger sample sizes are necessary to reduce sampling error. Blaikie (2000) lists several factors in considering sample size, namely (i) time and cost constraints, i.e. larger sample sizes can reduce cost or time efficient, (ii) the possibility of non-response error (refusal to participate), (iii) the heterogeneity vs. homogeneity of the population, i.e. the greater the heterogeneity of a population, the larger a sample needs to be and (iv) method of analysis to be used, i.e. a fairly large sample may be required to allow adequate variables to be tested in particular statistical analysis.

It is found that non-probability sampling, like convenience and snowballing, is claimed by some researchers to be almost as good as a probability sample (Bryman, 2004). This is because non-probability samples are often purposive in nature, i.e. to capture those respondents who have met predefined criteria of a study. For example, Chandler and Jansen (1992) selected their sample from a small geographical area in Utah based on predefined criteria, such as when respondents' firms were incorporated, that they were not subsidiaries of parent companies, and that they had a good reputation at the time that the research was conducted. Bryman (2004) mentioned though it is impossible to generalise findings through convenience sampling, this is not to suggest that the strategy should never be used.

4.6.2 Survey Sampling for the Current Study

The third phase of fieldwork involved a large-scale quantitative survey, conducted over a period of four months, with the purpose of investigating the relationships between handicraft producers' levels of commercialisation (production status, premises) and performance, and the person-related and contextual variables that influenced these. The sample for the survey was drawn from the census list of handicraft producers published by the Malaysian Handicraft Development Corporation in Sabah (MHDC, 2008), which contains the names of 2,182 handicraft producers, their contact details (home/workshop address and phone number) as well

details about the operation of their enterprise (full-time/part-time, domestic/workshop-based, number of workers hired, annual sales, etc).

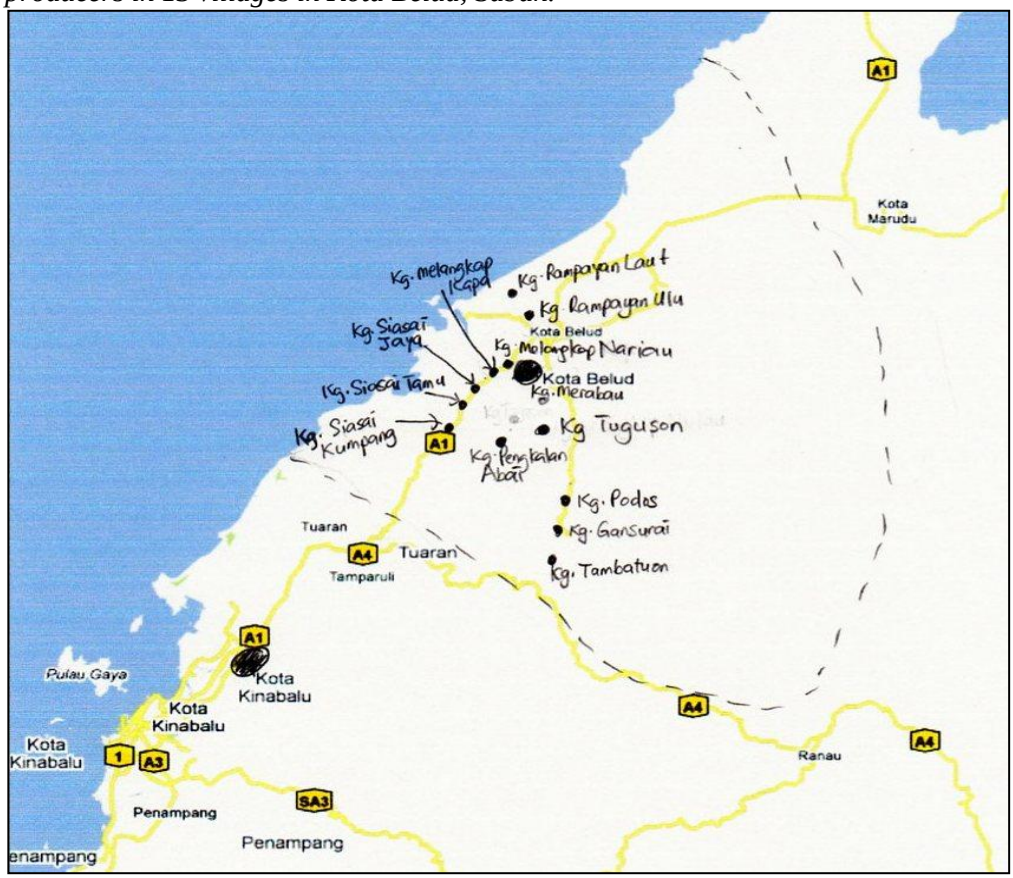
Kota Belud district was chosen as the geographical area for this study since the district contains the largest number of handicraft producers in Sabah, thus, it was a suitable and convenient site in terms of getting access to a large number of respondents. Nevertheless, out of the 682 handicraft producers in Kota Belud district listed in MHDC census, only 338 names were potential contacts, due to incomplete and outdated contact details of the remaining names, especially their phone numbers. These 338 producers were scattered across 13 villages in Kota Belud. Within each of these areas, the researcher contacted producers at random, and surveyed as many as possible given time and manpower constraints. Within this, full-time/part-time status and income were used as further sampling criteria, whereby the researcher aimed to survey approximately 50 respondents who were full-time, higher income, 50 respondents who were full-time, lower income, 50 respondents who were part-time, higher-income and 50 respondents who were part-time, lower income. The whole process led to 210 producers being surveyed in total.

Table 4.4: *Profile of Survey Sample, by Village (n=210)*

Handicraft Villages in Kota Belud, Sabah	Total Number of Producers (based on MHDC Census)	Number of Respondents contacted via phone calls and agreed to be interviewed
Kg. Merabau	53	35
Kg. Rampayan Laut	32	20
Kg. Rampayan Ulu	69	50
Kg. Siasai Kumpang	10	5
Kg. Siasai Tamu	12	5
Kg. Siasai Jaya	28	10
Kg. Melangkap Kapa	16	10
Kg. Melangkap Nariau	33	20
Kg. Tuguson	24	15
Kg. Pengkalan Abai	9	5
Kg. Pados	12	5
Kg. Gansurai	20	10
Kg. Tambatuon	20	10
	338	200
Additional interviews (walk-in to weekly market, and handicraft exhibition)		10
TOTAL RESPONDENTS		210

To survey the respondents, the researcher visited each village independently starting with the most familiar village (that had been visited by the researcher in previous fieldwork) and villages that were nearest to the town of Kota Kinabalu (Kg. Merabau, Kg. Rampayan Laut, Kg. Rampayan Ulu) , followed by other villages nearby (Kg. Siasai Kumpang, Kg. Siasai Tamu, Kg. Siasai Jaya, Kg. Melangkap Kappa, Kg. Melangkap Nariau) and finally those that were remote from the town (Kg. Tuguson, Kg. Pengkalan Abai, Kg. Podos, Kg. Gansurai, Kg. Tambatuan). Figure 4.5 shows the study site for the survey. It was quite difficult for the researcher to understand certain areas the respondents lived in, as she was not familiar with all the village areas in Kota Belud. Nevertheless, the researcher was assisted by her office colleagues, Mrs Tini, Mr Humin and Miss Yati, who guided and accompanied her on how to get to these areas. The interviews took place in two villages named Kampung Merabau and Kampung Rampayan Laut.

Figure 4.5: *Survey Site for Large-Scale Survey which involved 210 handicraft producers in 13 villages in Kota Belud, Sabah.*



4.6.3 Principles of Questionnaire Design

The questionnaire is a widely used research instrument to gather data from respondents, either administered by respondents themselves or through structured interviews (Bryman, 2004). The development of a questionnaire for a survey could start from predefined research questions, based on analysis of the relevant literature (Frank, et al, 2007, Baum & Locke, 2004), or based on analysis of results of previous fieldwork (Miles and Huberman, 1994). For example, Soldressen, et al (1998) used a previous questionnaire on home-based business for their study of home-based textile artists, after the questionnaire was pretested and revised based on respondents' comments during a pilot study.

Bryman (2004) mentions that a structured questionnaire often comprises several types of questions, for example, personal factual questions, questions about attitudes, questions about beliefs and values, and questions about knowledge. In addition, a questionnaire may also contain questions about respondents' perceptions, which

require respondents to provide their opinions and beliefs about an event. These types of questions often ask the respondents to rate their degrees of agreement on a series of statements relating to an event. The Likert-scale is a widely used format to measure the intensity of respondents' feeling about each statement. Often, the researcher uses either 7-point or 5-point rating scales to measure responses. It has been argued that the number of scale points has significant impact on the reliability of the measure, i.e. the reliability of a scale increases as the number of scale points increases (Matell & Jacoby, 1971). Nevertheless, Lissitz and Green (1975) contend that there is no optimal number for scale points; although their studies showed a definite levelling off in the increase in reliability after 5 scale points. Furthermore, they assert that the number of scale points that is best for any study depends upon the investigator's interest and objectives.

In relation to the choice of variables and items used in a questionnaire, studies often develop several related items to measure a single variable. Bryman (2004) explains multiple-item measures of concepts are developed because of the large number of categories generated to explain a concept, and they are often developed to ask attitude questions. For example, Roberts and Robinson (2010) developed subscale items for their study based on results emerging from previous fieldwork – (focus groups). They developed ten to fifteen items (series of statements) for each component of the attitude questions. Baum and Locke (2004) used five-point scales ranging from 1 (strongly disagree) to 5 (strongly agree) to measure five items under a 'passion for work' variable. Often, the items used to measure a variable in a questionnaire are mainly adapted from previous research, for example Lee and Tsang (2001) used four indicators of self-reliance and 12 indicators of extroversion which they adapted from previous related studies. However, some studies use a single independent item to measure each attitude variable, for example, Townsend, et al (2010) developed one item for every variable, i.e. only one statement was used to measure each variable of skills, self-confidence and experience, on a five-point scale. Questionnaires administered by face-to-face structured interviews involve the interviewer recording all responses from respondents onto a response sheet. The advantages and disadvantages of face-to-face structured interviews can be compared with self-completion questionnaires. Bryman (2004) asserts that the use of face-to-

face structured interviews in a survey, though involving higher cost due to the extensive time required, may be a good choice because of the possibility of getting a high response rate and lowering the risk of missing data due to the opportunity to probe and guide respondents. In addition, structured interviews involve flexibility in questioning the respondents as it allows the interviewer to ask questions in appropriate ways salient to respondents' level of literacy (Bryman, 2004, Berma, 2001).

4.6.4 Questionnaire Design for the Current Study

In this study, the list of items and variables in the questionnaire was developed on the basis of literature review, findings from previous fieldwork, feedback from a panel of experts, as well as a pilot test. Initially, a draft of questions was developed based on the results of the in-depth interviews, by taking into consideration how interviewees express things in their own way. For example, some interviewees mentioned that they always loved to make handicrafts, that they were keen to devote their free time to making handicrafts. This response was used as guideline for developing a statement to indicate 'passion' as one of the items under the motivation variable. In the next step, the researcher reviewed some relevant literature to observe how questions and items can be developed, as well as to see how an item has been defined in previous studies. Then, the draft of the questionnaire was validated in terms of the relevance and quality of the questions developed. All questions and choices of responses were reviewed by an expert panel in rural research, including three key informants from the Malaysian Development Corporation, Ministry of Rural Development of Sabah and a researcher in the National University of Malaysia. The questionnaire was revised based on feedback received from the expert panels. In addition, to seek opinion on the appropriate way to conduct face-to-face structured interviews with rural people, a pilot test was conducted with ten handicraft producers in Kota Belud. The pilot test was conducted by the researcher's friends. Comments were mostly related to the difficulties of getting accurate responses to Likert-scale questions, to which some of the respondents tended to reply *"mana-mana sahaja"* (which means "whichever") when they were asked to indicate their level of agreement on a five-point scale. In order to address this problem, the

researcher printed out the scale-point separately on a card, which clearly indicated the number and degree of agreement. The scale-point card was shown to the respondents when questions on scale items were being asked to them. Finally, all questions were revised and finalised according to the feedback received.

The questions included dichotomous and attitudinal Likert-scale questions as well as an open-ended question relating to respondents' incomes. Attitudinal questions were used to ask respondents' likeliness and agreeableness on a particular statement about how they saw themselves. The questionnaire contained four sections, comprising 54 questions altogether: (i) Section A asked about respondents' demographic backgrounds, (ii) Section B collected data pertaining to respondents' personality characteristics, skills and motivations, whereby the respondents were asked to rate their agreement or disagreement on particular statements, (iii) Section C consisted of questions that asked respondents to indicate their level of agreement about their immediate environment, and, finally, (iv) Section D collected data relating to respondents' handicraft work. Questions in Section A and D were in the form of dichotomous responses, where 'yes' or 'no', multiple choice and open ended questions were used. Meanwhile, for Sections B and C, respondents were asked to respond on five-point Likert scales. For consistency purposes, the questionnaire was translated into the Malay Language, so that all respondents would be directed to standard questions and, thus, provide relevant responses. Appendix 4.2 shows the questionnaire used in this survey (English version).

In relation to attitudinal questions, the statements for the items relating to personality factors, i.e. self-confidence, self-reliance, perseverance and achievement orientation, were developed based on the results of the in-depth interviews as well as adapted from previous studies which had defined them. The statement for 'self-confidence' was adapted from McClelland's definition (McClelland, 1987), i.e. expected probability in the individual's own ability to complete a task or meet a challenge. Therefore, for the current study, the item for 'self-confidence' was phrased as "I strongly believe in my ability to achieve the things I want". The statement for 'self-reliance' was adapted from a definition by Duchesneau (1987) in Lee and Tsang (2001), i.e. "a person's preference for doing things and making decisions without the help of others". Therefore, in the current questionnaire, 'self-

reliance' was phrased as "I much prefer to do things for myself, rather than rely on fate or others". For 'perseverance', the item was phrased based on Baum and Locke's (2004) definition, i.e. "a trait that involves sustaining goal-directed action and energy even when faced with obstacles". Therefore, in this study, 'perseverance' was phrased in a reverse scale, as "I find that unexpected setbacks really stop me from achieving what I want". The statement for 'achievement orientation' was derived from McClelland's (1987) definition, i.e. "a desire to do well in order to attain a feeling of accomplishment". Therefore, for the current study 'achievement orientation' was phrased as "I plan for new and better ways of doing things to improve performance".

In this study, respondents were selected based on three key criteria, i.e. production status (full-time or part-time), location of production/premise (workshop or home-based) and performance in terms of sales or profit received from their handicraft (high, medium or low). The researcher already had some information about the nature of production and performance of the selected interviews based on MHDC census list as well as from key informants. Nevertheless, it is important to investigate in-depth from the perspective of the interviewee by asking them what they perceived their status of production, whether they regard their production as workshop-based or home-based, and how they perceive their performance, whether successful, moderate or less successful.

4.6.5 Execution of Survey for the Current Study

All the 200 target respondents were selected based on key criteria used to control the selection of the sample, which involved proportionate number of full-time and part-time producers, workshop-based and home-based producers, and high and low income producers. All the potential respondents were first contacted via phone calls, asking whether they would like to participate in the survey. For representativeness purposes, a few screening questions were also asked, especially relating to whether they were still part-time or full-time producers, and whether they were government-assisted or not.

Unexpectedly, an additional ten respondents were gathered through several walk-in interviews in a weekly market and handicraft exhibition in a shopping

complex. Luckily, though it was a 'walk-in' approach, the respondents were very permissive and happy to share their views, when the interviewer told them that she was a student doing research on handicraft entrepreneurs in Kota Belud.

Face-to-face structured interviews with all respondents were conducted personally by the interviewer. However, not all interviews were conducted alone, due to the different language and dialects of some of the respondents, especially the Bajau and Iranun people. For these cases, the researcher was assisted by two friends, Salmiah Tartib and Dg. Safrina Ag. Budin, Iranun and Bajau natives respectively, who joined the researcher during these interviews. They translated some of the sentences and words that could not be understood by the respondents. For consistency purposes, the assistants were trained and informed about the background of the survey and the process of conducting the interviews. All responses from respondents were recorded on a hard copy questionnaire by the interviewer and some photographs were also taken. Interviews were conducted at each respondent's preferred place and time, thus not all interviews were conducted at respondents' houses, instead some took place at their shops, workshops, at government incubators, or when they were at the weekly market.

4.6.6 Principles and Practice of Survey Data Analysis for the Current Study

Quantitative data analysis involves statistical techniques for analysing data based upon the research objectives. The process of testing the data can be carried out using computer software packages, e.g. SPSS for Windows. Nevertheless, the decision on which analytical techniques should be used requires careful consideration, especially to ensure the techniques are suitable to produce results significant to research objectives. There are three main techniques widely used by researchers for quantitative analysis, i.e. univariate, bivariate and multivariate (Bryman, 2004). Each technique is used for different purposes, for example, univariate analysis is a method for analysing a single variable at a time, bivariate analysis is used to analyse relationships between variables, and multivariate analysis involves analysis of relationship between three or more variables.

For the current study, suitable quantitative data techniques were performed to analyze the data according to the research objectives, i.e. (i) bivariate analysis to test

for significant relationships between variables independently, (ii) cluster analysis to explore whether survey respondents could be grouped into distinct clusters based on key variables and (iii) One-Way ANOVA to explore significant differences between the clusters in terms of person-related and contextual factors.

In many studies, bivariate analysis has been often performed as the preliminary analytical technique with the purpose to explore the relationship between variables through cross-tabulating two variables to check on their significant impact on each other (Bryman, 2004). Similarly, in this study, bivariate analysis was performed through chi-square testing to see whether any significant relationships existed between variables of interest, for example, to examine whether demographic variables (age, gender, education level, marital status) had a significant relationship with respondents' status, premises or performance.

It was found that the results of bivariate tests were inconclusive because of the mixed results they produced in terms of the relationship between respondents' status, premises and performance, and their person-related and contextual factors. Therefore, the researcher explored the possibility to classify the respondents into groups based on their status, premises and performance,. The use of cluster analysis to classify entrepreneurs into different groupings has been used by Birley and Westhead (1994), Korunka, et al (2003) and Kalantaridis and Bika (2006). In the current research, a two-step cluster analysis was performed. This technique allows relationships between variables to be explored in a simultaneous way. It was intended to predict groups or clusters of respondents according to key variables of status, premises and performance that were analysed together. Following a confirmation procedure (discriminant analysis) of the clusters that emerged, the researcher undertook univariate analysis (One-Way ANOVAs) to identify person-related and contextual factors that had a significant impact on cluster membership.

4.6.7 Critical Reflections on the Survey for the Current Study

The use of a survey in the final phase of this study provided a meaningful picture of what should be studied. The choice of method contributed to the classification of handicraft producers in Sabah, and quantitative understanding of the factors influencing their choice of commercialisation level and performance. Nevertheless,

there were several challenges encountered when conducting the survey, especially in relation to getting responses from the respondents for questions that required them to give their perceptions on statements with Likert-scale points. It was found that many of them initially gave ambivalent opinions or modest responses especially relating to their perceptions of their personal characteristics, skills and motivations. Thus, sometimes, probing was employed to elicit their perceptions more accurately. Though probing can lead to bias (Bryman, 2004), it was seen by the researcher as appropriate when responses from respondents were all ambivalent. A show card with five levels of agreement (in words and numbers) was shown by the interviewer to the respondents when statements on attitudinal questions were read to them. The researcher also practiced giving a token of appreciation to respondents who were willing to be interviewed in the survey, i.e. a pen with logo of Universiti Malaysia Sabah on it, which cost RM3 each. However, the researcher found the activity of buying producer's handicraft after interviewing him/her increased the interest of other producers to get involved in the survey. This method was useful for interviews which were conducted in the weekly market, where most handicraft producers in Kota Belud sold their items. The researcher bought producers' handicraft products after interviewing them, not necessary expensive ones, but small handicrafts that they made, and expressed the beauty of their handmade items. The researcher found that more respondents were keen to be interviewed. Another challenge encountered by the researcher during the structured interview was relating to modest responses from respondents on questions about performance (sales turnover in Ringgit Malaysia). This matter was anticipated by the researcher before conducting the interview. Respondents who gave modest responses on sales turnover were then cross-checked with the data listed in the MHDC census, and for confirmation, the respondents were also asked to provide the percentage of profit they received every year, instead of in Ringgit Malaysia (RM), which the researcher found was a less sensitive measure of performance.

4.7 Summary

The aim of this chapter was to explain the research approaches and strategies used in the empirical study. The chapter has described the process of conducting the three phases of fieldwork, as well as the techniques of analysing the data from the view of good research principles as well as in practical research. The first phase of fieldwork involved a local desk study and key informant interviews with the main objective to get fill gaps in knowledge about the nature of the handicraft sector in Sabah from the elite perspectives. Semi-structured interviews were conducted with five key informants, using a discussion guide. The results of the key informant interviews provided several emergent issues relating to producers' choices for level of commercialisation and performance. The next phase of fieldwork, i.e. in-depth interviews, were then conducted to investigate further the exploratory results of key informant interviews combined with findings from the review of entrepreneurship literature. The aim of the in-depth interviews was to understand deeply the how handicraft producers behave throughout their production and how they make decisions towards greater levels of commercialisation and performance. In-depth interviews were conducted with 16 handicraft producers in Kota Belud, selected purposively from the Malaysian Handicraft Development Corporation Census (MHDC, 2008). Some respondents were also approached based on the suggestions from key informants. The data from the in-depth interviews were analysed manually by the researcher and all codes and categories were produced in a word document as well as in a schematic diagram. The results contributed a deeper understanding of the factors influencing commercialisation levels and performance, which were then used in the development of the questionnaire for the survey.

The final phase of fieldwork was a large-scale survey which involved face-to-face structured interviews with 210 handicraft producers in 13 villages in Kota Belud, Sabah. With the MHDC Census as the main sampling frame, a convenience sampling strategy was employed, i.e. based on the accessibility of respondents in terms of active contact details. Due to time constraints, some respondents were also gathered through snowballing technique and walk-in to weekly markets and exhibitions. Despite the convenience approach, key criteria were also taken into considerations, i.e. the final sample should comprise a proportionate number of full-

time and part-time producers, workshop and home-based producers and high and low performing producers. Suitable quantitative techniques were performed to analyse the data according to the research objectives, i.e. (i) bivariate analysis (ii) cluster analysis and (iii) One-Way ANOVAs. The results of the first phase fieldwork (key informant interviews) were incorporated into the discussion of the nature of handicraft production in Sabah, in Chapter 2. The next chapter discusses the results of the second phase of fieldwork, i.e. the in-depth interviews.

Chapter 5 Results of In-Depth Interviews with Handicraft Producers in Sabah, Malaysia

5.1 Introduction

The previous chapter presented the methods and techniques for the empirical study, this chapter now presents the results of the in-depth interviews with handicraft producers. The aim of this phase was to understand in-depth, from the producers' perspective, how they got involved in handicraft production, and how they make decisions about commercialisation. In Chapter 2 it was found that the vast majority of handicraft producers are domestic and mainly part-time (MHDC, 2008). The in-depth interviews sought to understand why this kind of production is so favoured among handicraft producers in rural Sabah, whether it is related to the producer's practical situations, or if producers see particular challenges or risks with full-time status or workshop production. The in-depth interviews also aimed to understand how some producers move to workshop production, and how they operate their businesses in spite of all challenges/problems. The precise objectives for this fieldwork were:-

i. To explore how handicraft producers first get involved in handicraft production and to tell the story of how their enterprises began.
ii. To understand how handicraft producers operate their enterprises, and the choices they have made about commercialisation, that is their status (full-time/part-time) and location of production (workshop/domestic), as well as their production techniques and how they market their handicrafts.
iii. To investigate factors that stimulate or prevent moves to a greater level of commercialisation, by exploring handicraft producers' perceptions of the challenges and benefits of domestic vs. workshop-based production.
iv. Based on (i) to (iii), to gather insights on the person-related and contextual factors that might explain levels of commercialisation and performance of handicraft producers, including personality traits, skills, motivations and contextual factors.

The chapter now reports the results of the in-depth interviews. First, an overview is provided of the 16 interviewees' profiles, together with a summary of their status, premises and performance levels (Section 5.2). Next, the chapter reports how interviewees started their enterprises (Section 5.3), and how they go about their current operations including accounts of their decisions relating to status and premises (Section 5.4). After this, the chapter reports interviewees' perceptions of the factors that influence the decision to produce handicrafts at home or in a workshop, or as full-time or part-time (Section 5.5). The chapter then introduces ideas of the profile characteristics and contexts that influence producers' status, premises and performance (Section 5.6). These factors are taken forward for testing in the survey research. Finally, Section 5.7 summarises the chapter.

5.2 Profile of the Interviewees

In this section, the profile characteristics of the interviewees are introduced. Of the total 16 respondents interviewed, ten were domestic producers and six were workshop-based. These interviewees were also a mix of full-time and part-time producers. Table 5.1 shows the interviewees' profiles.

Table 5.1: *Interviewees' Profiles (n=16)*

No.	Demographic Profile	Product Type	Status	Premises	Average Annual Sales Turnover	Notes
1	Dalila, Female, 30, married, finished high school, housewife.	Textile (*dastar*)	Part-time	Own home	RM 3,600	Raw materials subsidised by *MHDC during initial start-up. Not able to produce full-time as busy with household chores and child care.
2	Raiting, Female, 41, married, finished primary school, has income from farming and selling vegetables.	Basketry	Part-time	Own home	RM 300	Raw materials and production space (workshop) built by **KPLB for the villagers to make handicraft. Does not produce full time as busy with farming and receives a higher income from her vegetables business.

No.	Demographic Profile	Product Type	Status	Premises	Average Annual Sales Turnover	Notes
3	Kamariah, Female, 26, single, finished high school, attended craft making course organised by *MHDC, working as full-time clerk.	Textile (*dastar*)	Part-time	Own home	RM 2000	Applied for equipment incentive from MHDC (rental of a weaving machine for 3 years). Finds the income from *dastar* making is attractive. Plans to quit her current job as clerk in order to make *dastar* full time.
4	Nurhidayah, Female, 22, single, final year student in Diploma in textile weaving at the National Craft Institute.	Textile (*dastar* and *songket*)	Part-time	Parent's home	RM 500	Helps her mother in *dastar* making during free time. Plans to make *dastar* full time once graduated.
5	Ramlan, Male, 40, married, has Polytechnic certificate in electrical engineering and own electrical repairs business, also as supplier for *parang* (machete).	Metal-based (*parang*/ machete)	Part-time	Own home	RM 2,400.	Makes *parang* part-time as is busy with his electrical repairs shop. Knows all the *parang* makers in Kota Belud, therefore became the middleman between producers and the ministry of rural development in Sabah, especially on promotional programs, orders from customers, supports and incentives needed.
6	Pitah, Male, 36, married, finished primary school, has income from farming.	Metal-based (*parang*/ machete)	Part-time	Own home	RM 1,000	Enjoys making *parang* during free time, but not interested in greater involvement due to his farming business.
7	Julitah, Female, 38, married, finished secondary school, appointed as chief for ***ODOP project.	Tree bark-based handbags, purse, pencil case	Full-time	Own home	RM 36,000	Started the business with own savings. Prefers to work independently, rather than rely on government incentives or subsidies. Would like to expand her business, to own a proper workshop, souvenir/retail shop in Sabah and West Malaysia.

No.	Demographic Profile	Product Type	Status	Premises	Average Annual Sales Turnover	Notes
8	Alminah, Female, 32, married, university graduate, attended craft training in *MHDC Craft Incubator, appointed as chief for ***ODOP project.	Textile (*dastar* and *songket*)	Full-time	Own home	RM 24,000	During initial start-up, raw materials and equipment were subsidised by *MHDC. Prefers to produce at home due to inadequate capital (money, machines, workers' wages) to build a workshop. Perceives working at home is convenient as weavers can concentrate better at their own time.
9	Rosman, Male, 43, married, finished primary school.	Metal-based (*parang*/ machete)	Full-time	Own home	RM 36,000	Prefers to produce handicraft at home, in a small room, rather than rely on government support. Started the production with own passion. Likes to be independent rather than exploited by the government contract. Has good network with middleman.
10	Martinin, Male, 30, single, finished secondary school.	Metal-based (*parang*/ machete)	Full-time	Own home	RM 18,000	Quit as van driver to be involved in *parang*-making full time. Received family supports, informal and formal training, government incentives
11	Ramlan Salon, Male, 54, married, finished primary school.	Metal-based (*parang*/ machete	Full-time	Workshop	RM 36,000	Perceives *parang*-making as heritage preservation, adaptive to modern technology. Prefers to work together with other *parang* makers (cooperative in nature).
12	Ramiah, Female, 60, married, no schooling, appointed as Adiguru (Master Craftsperson) by the *MHDC, craft trainer.	Textile (*dastar*)	Full-time	Govt Workshop	RM 9,600	Since two years ago, the operation has been slow due to lack of workers/trainees in the workshop. Receives many orders but not able to meet them, unless with helpers.

No.	Demographic Profile	Product Type	Status	Premises	Average Annual Sales Turnover	Notes
13	Pandian, Female, 59, married, no schooling, appointed as Adiguru (Master Craftsperson) by the *MHDC, craft trainer	Textile (*dastar* and *sembatian*)	Full-time	Own workshop	RM 70,000	Pays attention to product packaging, has regular customers. Perceives that not all producers can really benefit from workshop production. Perceives a person should be determined, helpful, independent, and passion to succeed.
14	Roslan, Male, 45, married,	Metal-based (*parang*/ machete)	Full-time	Govt workshop	RM 8,400	Looks forward to having a middleman who can sell his product in West Malaysia, as he perceives the market there is better than in Sabah.
15	Luyah, Female, 40, married, attended religion studies, has income as religious teacher	Textile (*dastar* and *sembatian*)	Part-time	Own workshop	RM 24,000	Already eight years in *dastar* making, currently has two helpers. Not always able to make *dastar* everyday due to her job. Needs more workers to produce more *dastar*.
16	Jamawid, Male, 30, single, does odd jobs, produces *parang* in his uncle's workshop (subsidised by government)	Metal-based (*parang*/ machete)	Part-time	Govt Workshop	RM 1,800	Sells through uncle (weekly market, sells directly to customers who come to the workshop, receives orders from retailer). Does not intend to make *parang* full time as he helps his parents' business (selling vegetables and helping in food stall).

*MHDC: Malaysian Handicraft Development Corporation, Sabah Branch
**KPLB: Kementerian Pembangunan Luar Bandar (Ministry of Rural Development)
***ODOP: One District One Product

Table 5.1 shows that nine of the producers were female and seven were male. There was a division between female and male producers based on the type of handicrafts they produce. Seven female producers were *dastar* makers (textile-based handicraft) and two made forest-based handicrafts like baskets and handbags, whereas all males were *parang*-makers (metal-based handicrafts). This similar trend is also found in the MHDC census profile (2008), which shows that women's participation in handicraft production is mainly in hand-woven materials, especially textile, basketries or bead-making, while men are actively involved in the production of metal-based handicraft production, mechanised or semi-mechanised like *parang* (machete), brass gong or wood carving. In terms of age, the interviewees were predominantly middle aged, with 11 of them 30 to 49 years, three of them 50 years and above and two of them less than 30 years. In terms of status, interviewees were the same number of full-time and part-time producers, whilst in terms of premises, ten of them produced at home, and six of them in a workshop. For income, average annual sales turnovers varied considerably, from only RM 300, to as much as RM 70,000. This spread of turnovers reflects the wider profile of handicraft producers in Sabah, as the MHDC census (2007) shows most (87 percent) producers earn less than RM 10,000 per year, 11 percent earn a moderate income (RM 10,000 to RM 30,000), and only a small number earns more than RM 30,000. Although there are only 16 interviewees in the sample and, therefore, no statistical significance can be drawn, it is interesting to cross-compare the status, premises and performance levels of the interviewees. Table 5.2 summaries the data.

Table 5.2: *The Production Status, Premises and Performance Levels of the Interviewees (n=16)*

Interviewees' Status and Premises	Performance (Average Annual Sales Turnover)	
	≤ RM 12,000 (n=9)	> RM 12,000 (n=7)
Domestic Part-time (n=6)	#1 (RM 3,600) #2 (RM 300) #3 (RM 2,000) #4 (RM 500) *5 (RM 2,400) *6 (RM 1,000)	
Domestic Full-time (n=4)		#7 (RM36,000) #8 (RM24,000) *9 (RM36,000) *10 (RM18,000)
Workshop Full-time (n=4)	#12 (RM9,600) *14 (RM8,400)	*11 (RM36,000) #13 (RM70,000)
Workshop Part-time (n=2)	*16 (RM1,800)	#15 (RM24,000)

 # = Female,
** = Male*

To present interviewees' performance levels, interviewees are categorised as either low or high performance based on their average annual sales turnover. The cut-off level of RM 12,000 is based on average gross household incomes in rural areas as reported by the Population and Housing Census of Malaysia (2010). People with a monthly gross household income of less than RM 990 (approximately RM 12,000 per year) are considered 'poor' or 'low income'. As might be expected, Table 5.2 shows that the lowest sales received amongst all interviewees were for the part-time domestic producers. These interviewees supplement their incomes with other jobs or businesses, especially farming. However, Table 5.2 also shows that all the domestic full-time interviewees achieved high sales, two comparable to those of the full-time workshop. Therefore among the interviewees, having domestic premises does not equate with having low sales turnover. In fact, three of the workshop interviewees (one part-time, two full-time) reported low sales turnovers. It is worth investigating why some interviewees who produce handicraft at home achieved high sales turnovers, whereas others who produced in a workshop did not. Therefore, this chapter now reports how and why they started their enterprises, the choices they make about operations and the reasons why they make those choices.

5.3 How Interviewees Started their Enterprises

To understand how interviewees arrived at their current level of commercialisation, interviewees were asked how they first got involved in handicraft production, specifically, when they first learned about handicrafts and who was involved in their initial production. It is possible that how they started in handicraft production may have influenced later decisions to go full-time or part-time, or to produce from home or in a workshop. Previous studies of entrepreneurial development contend that a person's life history like age when they started a business (Kalantaridis & Bika, 2006), or supportive upbringing, for example parental entrepreneurship or encouragement from family and friends (Davidsson & Honig, 2003) increase the probability of a person entering into a business. Therefore, in this section, interviewees' first involvement in commercial handicraft production is discussed.

5.3.1 When interviewees first learned to make handicrafts

From the interviews, most (14 out of 16) producers stated they first learned to make handicraft when they were teenagers. Most interviewees learned from their parents, so for these producers, the family played a role in their involvement in handicraft production (e.g. interviewee #1). Meanwhile, two interviewees attended courses in craft incubator (e.g. interviewee #3).

> I learned to make *dastar* from my mother since I was 17. I helped her to arrange the threads into the *kek* (weaving machine) and weaved the *dastar* while she's doing the house chores (#1, part-time domestic, female)

> Eight years ago, I knew absolutely nothing about *dastar* weaving. No one in my family make *dastar* or other crafts....Weaving *dastar* never crossed my mind before I attended the course (#3, part-time domestic, female)

5.3.2 How interviewees first started their own enterprise and who was involved during initial commercialisation

Next, interviewees were asked how they first started their own enterprises (production status and premises) and who was involved in this process. Table 5.3 summarises the responses. It can be seen that many interviewees mentioned friends, incubator attendance and wish to support family as their reasons for initial commercialisation. In addition, 'family and relatives' (eight out of 16) was quite often mentioned as important. This section starts with reporting the first level of commercialisation of domestic interviewees, then workshop producers.

Table 5.3: *How Domestic and Workshop interviewees first started their own enterprise and who was involved during initial commercialisation (n=16)*

Initial commercialisation	Original production Status and Premises prior to Current Operation				Total No. of incidence
	Domestic (n=10)		Workshop (n=6)		
	Part-time (n=6)	Full-time (n=4)	Part-time (n=2)	Full-time (n=4)	
How interviewees first started own enterprise					
Friends	#1, #2	#10			3
Attended incubator	#3, #4	#8			3
To earn money to support family	#5			#13, #14	3
Government came to village		#7		#14	2
Inherited from parents				#11, #13	2
Villagers placed order				#12, #13	2
Relatives			#15, #16		2
Who was involved during initial commercialisation					
Government agencies/officials	#1, #2, #3, #4			#12	5
Family	#1, #4	#7	#15, #16	#11, #12, #13	8
Friends		#7, #9, #10		#13, #14	5
Ex-incubators		#8			1

5.3.2.1 Domestic Producers

For domestic producers, 'friends'(interviewees #1, #2, #10) and 'attendance at incubator'(e.g. interviewees #3, #4, #8) were often mentioned as reasons why they first made handicraft for sale, mostly amongst part-timers. Three interviewees (two of them part-timers: interviewees #1, #2) stated they first made handicrafts for sale when friends and relatives came to them and placed orders:

> A close friend came to me three years ago. She asked me whether I would like to join her to make *dastar* for *Kraftangan* (Malaysian Handicraft Development Corporation) (#1, part-time domestic, female)

> When I was a teenager, I weaved some of the rattan into a flower vase. Just tried it out (laugh). I gave the vase to my cousin as a gift for her wedding day. She is a teacher. She told me that I can make money from it! (laugh) and gave some ideas on the size of the vase and the price I should set, and you know what? She then ordered two vases from me which I sold at RM10 each. (#2, part-time domestic, female)

> However, in year 2006, I quit my job as van driver, in order to concentrate on the *parang* making more seriously. I decided to quit from the job when I started receiving many orders from friends (#10, full-time domestic, male)

Three interviewees (two of them part-timers: #3, #4) mentioned that attendance in a MHDC craft incubator was their initial reason for making their own handicrafts for sale. Interviewee #4 did not clearly say when she first made handicraft for sale. Nevertheless, she talked about her attendance at the incubator as making her more interested to weave *dastar* in future. As stated by them:-

> I worked as a craft worker in the MHDC incubator in Kota Belud. They (MHDC) paid me per piece of *dastar* that I'd made. I was paid RM 300 to RM 400 for every *dastar* that I made. (#3, part-time domestic, female)

> I went for the course in Kota Belud incubator. After I completed the 6-months course, I decided to pursue my study in art. I am really interested to know more about weaving. I like to weave my own pattern. I feel satisfied to look at my own design. (#4, part-time domestic, female)

> Now, I have finished my training in the incubator since 2003. It was a three year training. Then I was absorbed to SDSI (one district one product) by *Kraftangan* (MHDC). SDSI means producing outside the incubator, not necessary in a workshop or premise, as

> long as we have a place to produce. (#8, full-time domestic, female)

Only one interviewee (part-timer #5) mentioned the need for money to support his family as well as difficulties in getting a job after finishing his polytechnic studies, as the reasons for first involvement in handicraft production for sale:

> After finishing the course, I did not continue to the diploma level. I needed to earn some money for myself, and for my parents. I am the eldest of four siblings. I was keen to find a job at that time rather than continue in my study. It was in 1990 I think. It was quite difficult to find a job, a permanent job. So, I did not only just wait for any job to come to me, instead, I did many odd jobs, like helping friends in their *parang* making, following them to *tamu* and helping them selling the *parang* and other goods. I can say that I really started to make *parang* for sale when I was 23 years old. (#5, part-time, male, currently not own enterprise, acting as middleman between MHDC and parang makers in his village)

Only one interviewee (full-timer #7) mentioned she first made handicrafts for sale when a government agency came to her village and suggested local people make handicrafts for an important event:

> In year 1999, people from *Pelancongan* (Sabah Tourism) came to our village. They asked us to make handmade bags naturally from *kulit kayu* (tree bark). The crafts were to be exhibited for the *Tahun Melawat Sabah* (Visit Sabah Year) in year 2000. Starting from that time, I tried to make more handbags. Within a month, the first time I made it, I managed to get 70 *ringgit*. I sold to *Pelancongan*, they came to my house and collected them. (#7, full-time domestic, female)

In terms of who else was involved in their initial commercialisation, government agency and officials were often mentioned by domestic producers, all of them part-timers (interviewees #1, #2, #3, #4). As stated by four of them:-

> But then I agreed to join my friend, as the *Kraftangan* provided the threads and agreed to buy the lost parts of

> the weaving equipment. (#1, part-time domestic, female)
>
> But when KPLB (ministry of rural development) came in for the *rakyattermiskin* (poverty eradication) program, they built a workshop for us so that we can make handicrafts there during our free time (#2, part-time domestic, female)
>
> The incubator chief told me that the price of *dastar* can reach up to 700 to 800 ringgit in the market. The incubator chief said, the *dastar* sold in the market have the same quality as mine, but its price in the market is quite high because of its commercial value plus with the promotion cost. (#3, part-time domestic, female)
>
> I will choose the *khidmat kraf. Khidmat kraf* is the incentive provided by the MHDC to all craft entrepreneurs, especially its students to start a craft business. MHDC will provide facilities like production space or machines for rent and other technical supports for the business. It would be helpful if the government can help young producers to start a business (#4, part-time, female, currently not own enterprise, still studying)

Several stated friends or neighbours in their village were involved in their initial commercialisation, all of them full-timers (interviewees #7, #9, #10):-

> In 2000, I - together with my neighbours and friends in the village - started to make crafts and we sent the products on our own to Sri Pelancongan (Craft Shop owned by Sabah Tourism). (#7, full-time domestic, female)
>
> During my early stage in making *parang*, I didn't know to carve the *parang* cover. Therefore, I asked my friend to carve the pattern on the *parang* cover. (#9, full-time domestic, male)
>
> The *Kraftangan* invited me to go there but for the time being I don't have enough budget to join the exhibition there, especially for the flight ticket. However, I did place some of my *parang* with my friend who went there for the exhibition. (#10, full-time domestic, male)

More part-timers stated family (interviewees #1, #4) was involved during initial commercialisation. Only one full-timer said so (interviewee #7). Interviewee #1 and #7 mentioned they received support from their husbands, whereas interviewee #4 mentioned her mother encouraged her and will help her in business in future.

> My husband encouraged me too. He said it is fine if I am interested in it. He also helped me to fix the *kek* with the new tools provided by the *Kraftangan*. (#1, part-time domestic, female)

> She wants me to be involved in *dastar* business, rather than to work in *Kraftangan*. She said, being self-employed is good rather than working with other people. She said, she will help me to start the business. She said she will try to provide everything as long as I am really interested in *dastar* making as a business. (#4, part-time domestic, female)

> My husband was one of the committee members of *persatuan KDC* (Kadazan-Dusun Cultural Association). He was the secretary. He told the people about me and my crafts. The association is active in cultural activity. They always take part in traditional dances and other exhibitions in Monsopiad Cultural Village in Pinampang. Initially I started to provide them with the traditional music crafts like *sompoton* and *sirung* for free. It was one way to promote my crafts there. Then, after they looked at my crafts, they started to order the crafts from me. (#7, full-time domestic, female)

From the testimonies, only one interviewee (full-timer #8) stated that ex-incubator workers helped in initial production:-

> In 2007, I was involved with the *Kraftangan* (MHDC) program. I tried to gather the former trainees in the weaving incubator, then the *Kraftangan* (MHDC) and the SDSI chief gave talks to them about the potential business for *songket* and *dastar* production. Then from there, I hired those who were interested in being my workers. (#8, full-time domestic, female)

5.3.2.2 Summary - How domestic producers first started their own enterprise and who was involved during initial commercialisation

Based on the domestic producers' testimonies, mostly the part-timers, 'friends' and 'attendance at an incubator' were most often mentioned as influential in starting their own enterprises. Only one interviewee stated they first made handicrafts for sale primarily because they wanted to earn money to support their family. One also mentioned starting because they were asked by a government agency to do so.

In terms of people involved in initial commercialisation, many interviewees, in particular part-timers, mentioned government agencies/officials, stating they received assistance from the government in terms of provision of resources (raw materials, equipment and production space). None of the full-timers mentioned receiving assistance from government agencies, but they often mentioned that 'friends' or 'other handicraft producers' in the village helped them in production and marketing. Several of them mentioned family being involved during initial commercialisation, i.e. they received supportive attitudes from their mothers or husbands. Only one interviewee stated she hired ex-incubator workers during initial commercialisation.

5.3.2.3 Workshop Producers

As for the workshop producers, Table 5.3 shows some differences in the commercial origins of part-time and full-time interviewees. Only part-timers (interviewees #15 and #16) stated that relatives made them first start their own enterprise. Interviewee #15 said she first made handicrafts for sale when she received orders from relatives. Interviewee #16 said he shared information about income received from selling *parang* (machete) with his uncle. It can be seen that his uncle set an example for him to first make *parang* for sale:-

> I first made *dastar* for sale in 1989, when my mother asked me to help her for our cousin's wedding. My aunt paid RM 150 to us for the *dastar* we made. It was used for decorating the bridal dais (#15, part-time workshop, female)

> At first, I was just helping my uncle. I learnt from him when I was 20 years old. He told me that he received RM 2000 to RM 2500 from *parang* sales. I started selling my first *parang*at age 22, at RM 80. (#16, part-time workshop, male)

The full-timers often stated they first made handicrafts for sale either because they wanted to earn money to support their family (#13, #14), or because they learned the activity from their parents (#11, #13), or as a result of villagers placing orders (#12, #13). As stated by six of them:-

To earn money to support family:-

> At that time, my kids were still small, I have many kids, ten of them. It was a really difficult time for us. I will cry if I start to tell you the story. Making *dastar* was the only way to earn money for a living. (#13, full-time workshop, female)

> I was 30 when I first learnt about this. I have one kid. He was nine years old. I was not working and only joined other friends in *parang* making. I was really interested in it and started making *parang* on my own for sale, after four years learning from the old man (#14, full-time workshop, male)

Inherited the handicraft production from their parents:-

> It's our family tradition, I'm the third generation in my family continuing this Bajau *parang* making. It's not only important to me for my heritage preservation but also it provides me with an income from selling it. (#11, full-time workshop, male)

> I continued weaving in this house. This is my mother's house. The weaving equipment was traditionally inherited from my grandmother. (#13, full-time workshop, female)

When villagers placed orders:-

> It has been made for sale for a long time. Making *dastar* was our main income in the village. Dusun people wore *dastar* every day as skirt, and wore head gear when they went to farm. (#12, full-time workshop, female)

> We wove not only for our own clothes but also for sale. The Dusun men, mostly cultivators and farmers, bought *dastar* from us and wore it as *tanjak* (head gear). The women wore *dastar* and *sembatian* as *sarung* (skirt), for their wedding clothes or as *selendang* (shawl). (#13, full-time workshop, female)

Only one interviewee (full-timer #14) stated government agencies came to his village and exposed him to the entrepreneurial development program through talks and promotional events (e.g. exhibition):-

> KPLB invited me to participate in the *Dialog Bersama Usahawan* (Entrepreneur' Dialogue) at the community hall Kota Belud, I brought my *parang* to the exhibition there. All were sold. During the final day of the talk, the KPLB asked whether I would like to join their exhibition in the future in other places. I said yes, I would like to join them. (#14, full-time workshop, male)

In terms of who was involved during initial commercialisation, part-timers stated that 'family' play a role. For example, interviewee #15 mentioned her husband encouraged her to make *dastar* (woven textile) for sale, and interviewee #16 stated his uncle helped him to sell the *parang* that he made:-

> Actually this workshop is my husband's idea. He is a teacher in *sekolah rendah* (primary school). He said since I have the skill to make *dastar*, and keep receiving orders from people, why don't I make it in a proper way, place the weaving equipment and all the parts and tools in a workshop and ask my friends to join together. (#15, part-time workshop, female)

> I started selling my first *parang* when I was 22, at RM 80. It was a small *parang*. I sold it through my uncle and it was bought by people who visited the workshop. (#16, part-time workshop, male)

'Family' was also often mentioned as important in initial commercialisation by the full-timers (three of them), especially in provision of production space (#11), technical production (#12) and supportive attitude (e.g: searching for raw materials, #13). As stated by three of them:-

> I first made *parang* for sale in my father's small workshop, when I was 20. I continued until now (#11, full-time workshop, male)

> My former workshop, it was a wooden workshop. It was personally built by my husband. My husband was

> doing odd jobs in the village including searching for wood and rattan in the jungle, and he supplied to those who would like to buy them. He searched for wood in the jungle and made it into tools for weaving. (#13, full-time workshop, female)

Two full-timers stated 'friends' helped them during initial commercialisation, in terms of providing sales opportunities (interviewee #13) and bringing raw materials together (interviewee #14):-

> I received orders from the museum because they knew about my products through my friend in this village. He worked in the museum, in *jabatan kebudayaan* (cultural department). So, the people in the museum knew about me from this friend of mine. I have lots of friends working in the museum. I know Dr Patricia, she's the director in the cultural department. I know Dato Irene, manager for Pelacongan (Sabah Tourism). We are friends since we were children. She always invites me to craft exhibitions. (#13, full-time, workshop, female)

> My friends and I, four of us make *parang* (knife) in this workshop. We bought the raw materials like wood, metal and glue on our own. (#14, full-time, workshop, male).

Only one interviewee (full-timer #12) stated 'government agencies' helped her in her initial commercialisation in terms of marketing:-

> Museum people came and ordered *dastar* from us. They bought our *dastar* for their exhibition or sometimes they took our crafts overseas for exhibition. Then, the *Kraftangan* (MHDC) came to the village, they asked us to make this as craft product. (#12, full-time workshop, female)

5.3.2.4 Summary - How workshop producers first started their own enterprise, and who was involved during initial commercialisation

Among full-time workshop producers, the reasons they first became involved in handicraft production were 'to support family', 'inherited handicraft activity from

parents' and 'villagers placed orders'. 'Relatives' were often mentioned by the part-timers, as they stated relatives provided sales opportunities and business ideas to them.

In terms of people involved in initial commercialisation, many interviewees (mostly full-timers) mentioned 'family' in terms of provision of production space, technical production skills and supportive attitude. Several interviewees (mostly the full-timers) said 'friends' provided sales opportunities and helped them get raw materials into production. Only one interviewee (full-timer) said she received assistance from the government in terms of marketing during her initial commercialisation.

5.3.3 Differences between Domestic and Workshop Producers on How they First Started their own Enterprise and Who was Involved during Initial Commercialisation

In summary, there were some differences between domestic and workshop producers in terms of how they first got involved in commercialisation as well as the people involved in the process. For domestic producers, many first made handicraft commercially either as a result of friends or through attendance in an incubator. Whereas for the workshop producers, several said they first started their own enterprise primarily to support family, because they inherited from their parents, they received orders from villagers, or support from their relatives. In terms of who was involved during their initial commercialisation, many domestic producers stated they received support from government agencies/officials, especially in terms of raw materials and equipment provision, whereas for workshop producers, most of them stated family were important during their initial commercialisation in terms of inherited skills and equipment from parents, or because they received orders or marketing advice/ideas from relatives. Friends were mentioned more by the domestic producers than workshop producers as people involved during initial commercialisation, especially for production and sales.

5.4 How Interviewees Currently Operate their Enterprises

Having reported how the interviewees' first got involved in handicraft production, this section now reports how interviewees operated their enterprises, in terms of how they made time for handicraft production, how they distributed or marketed products, and the sources of help or support they received. The section starts with the operations choices of the domestic producers, followed by the workshop producers.

5.4.1 How Domestic Producers Operate their Enterprises

It was important to have insight into how domestic producers, in particular, operated their enterprises, to understand how they deal with household work alongside their production. As seen already, of the ten domestic producers interviewed, six were part-timers with the remainder full-time. This section starts with reporting the operations of part-time producers, then full-time. Table 5.4 summaries the data.

Table 5.4: *How Domestic Interviewees Operate their Enterprises (n=10)*

Current Operations	Domestic Interviewees		Total
	Part-time (n=6)	Full-time (n-4)	
How they Manage their Time			
Help from family	#2,	#7	2
Organising their work	#1, #3, *#4, #6	#7	5
Ability to network	**#5	#7, #8, #9, #10	5
Marketing			
Personal order	#6,	#9, #10	3
Weekly market	#2	#8	2
Exhibition	#3	#7, #10	3
Government intermediaries	#1, #2, *#4, **#5	#7	5
Rented craft shop		#7	1
Sources of Support			
Government agency/officials	#3, *#4, **#5	#7, #8, #10	6
Friends		#7, #9	2
Other handicraft producers/villagers/neighbours		#7, #8	2
Make handicraft alone	#1, #2, #6		3

*Interviewee #4 is still a student, does not operate her own handicraft production, but helps her mother in craft making during her free time.

**Interviewee #5 does not operate his own handicraft production, but acts as middle person between government agencies (KPLB and MHDC) and the *parang* makers in his village.

5.4.1.1 How do domestic producers make time for handicraft production?

Part-time producers, by nature, must juggle different responsibilities, so interviewees were asked how they made time for handicraft production. It was revealed that domestic producers found three ways to make time for handicraft production, namely 'supportive attitude from family', 'ability to organise their work' and 'access to social network'.

For domestic producers, receiving support from their 'mothers' or 'husbands' was important to managing their time. Interviewee #2 mentioned about her mother staying at home with her kids while she was at the farm - her mother might also help her to look after her kids when making handicrafts. Interviewee #7 mentioned her husband's help in promoting her handicrafts to his friends. As stated by them:-

> My mother is still weaving but not as actively as before since her sight is very poor now. She is just staying at home with us. My kids will be with her when I am in the farm with my husband (#2, part-time domestic, female)

> My husband is one of the committee members of *persatuan KDC* (Kadazan-Dusun Cultural Association). He is the secretary. When he told them about me and my crafts, they started to order the crafts from me. They ordered 40 traditional dance costumes from me (#7, full-time domestic, female)

It was found from the testimonies that more part-timers (#1, #3, #4, #6) than full-timers (#7) mentioned they 'organise their work well' in managing their time for handicraft production. The testimonies indicate that although some part-timers were busy with other permanent jobs or daily responsibilities (i.e. as housewife/childcare, clerk, student, or farming), they still managed to devote their time for handicraft production by doing it as part-time at home. Three of them (#1, #4 and #6) said they make handicrafts during their free time as well as after they settle with their primary activities/responsibilities.

> I make clothes and weave *dastar* while the kids are sleeping, during the day, after they have their lunch. But not at night. It is my rest time (laugh). But when I received many orders for *baju kurung* (malay suit), especially during *bulan puasa* (month of ramadhan), I will stop making *dastar* for a while. (#1, part-time domestic, female)

> I used to help my mother in *dastar* making at home during my free time. When I have finished my homework, I always help my mother to make *dastar*. (#4, part-time domestic, female)

> I'm not always making *parang*. I don't have much time for that. No one will look after my buffalo in the farm. But, I still can make it when it is not the time for harvesting the paddy. (#6, part-time domestic, male)

Interviewee #3 continues making handicraft for sale, although she has a permanent job as a clerk, by focusing on a single marketing channel, i.e. exhibition organised by government agencies, to avoid failure to fulfil orders from customers.

> If I only have time to weave during the weekend, then it might take a month for me to finish it. The customer will be disappointed about waiting too long. To avoid this, for the time being, I only make *dastar* for selling in craft exhibition organised by the Tourism Board, the KPLB and *Kraftangan* itself. (#3, part-time domestic, female)

Interviewee #7, who operates her handicraft production full-time at home, manages to commit to both her role as wife/mother and her handicraft production. From her testimony, it seems that she is very dedicated to both family and her handicraft business. She shows a determined, organised attitude and a strong sense of self-reliance.

> Like me, over six months, the longest I will be away from home for handicraft exhibition is two weeks. Only two weeks not at home, the other remaining days I will be with my family. I have my own business, I can take care of my house, I can take care of my children. No intervention from outsider. For me if I can do the household on my own, that is my satisfaction. (#7, full-time domestic, female)

'Access to social network' was often mentioned by full-timers (#7, #8, #9, #10), whereby some of them network with friends, with other handicraft producers, with former trainees in the handicraft incubator and with middlemen, for sources of help in handicraft production (#7, #8) and for sales opportunities (#9, #10). So, for these producers, the ability to manage a social network was important to how they operated their enterprises, as stated by them:-

> Sometimes, I order from my neighbours too when I don't have much time to make the crafts alone. (#7, full-time domestic, female)

> I am involved with the *Kraftangan* (MHDC) program, and gather the former trainees who attended at the weaving incubator. Then from there, I hired those who were interested as my workers. They make the *songket* at their house and sell via me. I will collect the products from all weavers under me, and sell them in the market or based on personal orders. (#8, full-time domestic, female)

> I have many *orang tengah* (middlemen). They are soldiers and teachers from Semenanjung (West Malaysia) who are working here (Kota Belud). They regularly come to my house and make their orders. They ordered *parang* from me and sell them in semenanjung (West Malaysia). (#9, full-time domestic, male)

> The *Kraftangan* invited me to go there but for the time being I don't have enough budget to join the exhibition there, especially for the flight ticket. However, I did place some of my *parang* with my friend who went there for the exhibition. (#10, full-time domestic, male)

Only one part-timer (#5) showed his 'ability to network' when he explained how he mediated with other handicraft producers in his village and a government agency.

> I know all the *parang* makers in the village. Some of them are quite difficult to be contacted as they live in rural areas. Some of them do not have a hand phone. So, I think it is easier for the KPLB to contact them through me. Usually the KPLB will ask for my suggestion about *parang* makers who would be able to make a particular amount of *parang* that they want. Normally I will suggest the *parang* makers whom I know could produce the products on time and with reasonable price. (#5, part-time domestic, male)

5.4.1.2 How do domestic producers market their handicraft products?

In terms of how the domestic interviewees market their handicraft products, almost all (eight out of 10) mentioned 'government agencies' as a marketing channel. These were mostly part-timers (#1, #2, #3, #4, #5). Often mentioned by them were 'government-related events' and 'government subsidiaries'.

For 'government-related events', four interviewees (#3, #7, #10) mentioned they joined handicraft exhibitions organised by government agencies. Only one interviewee (#1) sold her handicrafts directly to her friend, who was involved in the government's SDSI (One District One Product) program. As stated by these four:-

> I only make *dastar* for selling in craft exhibitions organised by the Tourism Board, the KPLB and *Kraftangan* (MHDC) itself. (#3, part-time domestic, female)

> I follow many exhibitions or events outside Kota Belud. Every year, in May, when *kaamatan* (harvest festival) is coming, the *Kraftangan* (MHDC) usually invites its craft entrepreneurs to take part in handicraft sales and promotions which are held in Central Point Shopping Complex in Kota Kinabalu (#7, full-time domestic, female)

> I gave my name and contact details to *Kraftangan*. *Kraftangan* (MHDC) put my name on the list of *parang* makers in Kota Belud district. I registered my business. Starting from that day, I have always been contacted by them to join craft exhibitions in many places around Sabah (#10, full-time domestic, male)

> My friend makes handicrafts for SDSI project (One District One Product) under *Kraftangan* (MHDC). She also asked me to make *dastar* and collected the *dastar* at my house. Until now, I am still receiving orders from her as well as from other *dastar* makers too (#1, part-time domestic, female)

For 'government subsidiaries', two interviewees (part-timers #2 and #5) mentioned they market their handicrafts to government agencies like *Kraftangan* (Malaysian Handicraft Development Corporation) and KPLB (Ministry of Rural Development, Sabah), by receiving orders from them. Two of them (#4, #7) mentioned they sell their handicrafts through government retailers when they received orders from them. As they stated:-

> I sometimes make a few types of baskets and send them to the KPLB workshop for display or promotion to tourists or buyers who come to visit the handicraft workshop. From there, I started receiving orders from buyers. (#2, part-time domestic, female)
>
> The more *parang* I buy from a *parang* maker, the higher the commission they will give me. Mostly I resell their products to KPLB and *Kraftangan* (MHDC). Rarely to individual customers (#5, part-time domestic, male)
>
> My mother sold her *dastar* to a woman who came to our house once a month. The woman paid her money as she collected the *dastar* from my mother. My mother said the woman is from the Sri Pelancongan (Tourism Board). (#4, part-time domestic, female)
>
> Starting from there, the Sri Pelancongan (Tourism Board) repeated their orders with us, and sometimes they came to our place to collect the crafts they ordered. (#7, full-time domestic, female)

A number of domestic producers interviewed mentioned 'personal orders' (#6, #9, #10) and 'weekly market' (#2, #8). Only one mentioned 'rented craft shop' (#7).

> I will sell to the people who ordered from me. I have never sold in *tamu* (weekly market). (#6, part-time domestic, male)
>
> All these *parang* have already been ordered by someone. They come to my house and make their orders. (#9, full-time domestic, male)
>
> Every month I receive 20 to 30 orders of *parang*. Mostly are orders. Most of them buy more than ten *parang* from me. (#10, full-time domestic, male)
>
> I will send half to the handicraft workshop (MHDC workshop), and half to the *tamu* (weekly market) (#2, part-time domestic, female)
>
> I usually sell them in the *tamu* (weekly market), or sometimes customers will come to my house and order them. (#8, full-time domestic, female)
>
> I registered as *usahawan kraf* (craft entrepreneur) with *Kraftangan* (MHDC). I started selling my handicrafts in the handicraft centre in Kota Belud. I rented the shop from *Kraftangan* (MHDC). (#7, full-time domestic, female)

5.4.1.3 Who helps or supports domestic producers in current production?

In terms of who helped or supported them in their current production, more than half of the domestic interviewees mentioned they received support from a 'government agency', in terms of subsidised production equipment (#3, #8), subsidised workshops (#7) or financial incentives (#10). As stated by them:-

> I applied for the *bantuan peralatan* (equipment incentive). I rented weaving equipment last year from the MHDC, it cost me RM 15 per month. With the rented weaving equipment, I make *dastar* at home (#3, part-time domestic, female)

> But nowadays, with SDSI, they (MHDC) still help me with the *peralatan* (production tools) especially when they ordered the *songket* from us, but not enough, like for the silk threads (#8, full-time domestic, female)

> They (MHDC) said they will build a craft workshop near my house, and there will be trainees coming to the workshop. They (MHDC) pay the trainees. I will be the supervisor (#7, full-time domestic, female)

> Recently I did receive RM500 from MOSTI (Ministry of Science, Technology and Information) as an allowance for attending the *parang* making course in *Kraftangan* (MHDC) workshop. I've also received a certificate from MOSTI for attending their one-month course regarding the new mechanised *parang* making. (#10, full-time domestic, male)

For part-timers #4 and #5, although they did not receive support from the government agency directly, they mentioned the positive role played by the agency in assisting the handicraft producers in their production and marketing. As stated by two of them:-

> If I get both offers, I will choose the *khidmat kraf*. *Khidmat kraf* is the incentive provided by the MHDC to all craft entrepreneur, especially its students to start a craft business. MHDC will provide facilities like production space or machines for rent and other technical supports for the business. It is helpful if the government can help young producers to start a business (#4, part-time domestic, female)

> The demand for heritage crafts like this nowadays is getting higher. Besides, there are many supports and incentives from the government for craft development. The *Kraftangan* (MHDC) provides training in craft

> production, and helps in promoting the *parang*. (#5, part-time domestic, male)

'Friends' and 'other handicraft producers' were also mentioned by some of the domestic producers interviewed, mostly by the full-timers (#7, #8, #9) as sources of support, especially as helpers in production of their handicrafts.

> I have one friend who can supply me with the traditional wedding costumes. She really has the skill to make it. I have to pay her deposit when I make an order, and pay the rest of the amount once I collect it. (#7, full-time domestic, female)

> The busiest days are when I can only sleep two hours for the day, especially when there are large orders from customers. Normally I make it collectively with other producers in the village, like five of us. (#7, full-time domestic, female)

> I am doing this with a friend. He helped me throughout production and sales. (#9, full-time domestic, male)

> I have workers, but not in one place. I don't pay them monthly wages. They make *songket* in their house. (#8, full-time domestic, female)

A number of domestic producers interviewed (#1, #2, #6) did not mention exactly who was currently involved directly in their handicraft production. These were mostly part-timers. However, the testimonies provide insight that these domestic producers make their handicrafts alone at home, as a part-time activity, without any major source of help from outside, except for one producer with a friend who regularly places orders (#1), and one who makes handicrafts together with her mother at home(#2).

5.4.1.4 Summary – Current Operation of Domestic Producers

For domestic producers interviewed, in terms of how they made time for handicraft production, it can be seen from the testimonies that 'ability to organise their work' was often mentioned by them, mostly the part-timers. It seems that although these producers are busy with other primary job/responsibilities (e.g. farming, permanent job, household work/childcare), they still manage to make handicrafts for sale. It is also quite interesting to find that there are two female

interviewees (married with children) in this group, able to operate their handicraft production full-time. This provides insight that the complexity of responsibilities held by some part-time domestic producers is possibly not the only, or real, reason that prevents them from being involved in handicraft production full-time. 'Access to social networking' was mostly mentioned by the full-timers as how they are able to operate their enterprise continuously. Having close contact mainly with other handicraft producers, former incubator and regular customers, provides continuous demand for their products.

In terms of how they market their handicraft products, 'government agencies' were often mentioned by domestic producers, mostly part-timers, especially through exhibitions and intermediaries. In addition, a number of them mentioned 'personal orders', 'weekly market' and 'rented craft shop' as their marketing channel. Finally, in terms of sources of help in their current production, most mentioned 'government agencies', mainly in terms of provision of production equipment and premises. Help from 'friends' and 'other handicraft producers' were often mentioned by full-timers, but no part-timers mentioned these. It is found from the testimonies, unlike the full-timers, some part-timers seemed to make handicraft alone, with no helpers in their current production.

5.4.2 How Workshop Producers Operate their Enterprises

Out of the six workshop producers interviewed, four were full-timers who produced handicrafts every day in a workshop, and the other two were part-timers. This section starts with reporting the operations of full-time producers, then part-timers. Table 5.5 summarises the data.

Table 5.5: *How Workshop Interviewees Operate their Enterprises (n=6)*

Current Operations	Workshop Interviewees		Total
	Part-time (n=2)	Full-time (n-4)	
How they made time for handicraft production?			
Help from family	#15, *#16	#12,	3
Organising their work	#15, *#16	**#13	3
Ability to network	#15	#11, #14	3
Marketing			
Personal order	#15, *#16	#11, #14	4
Weekly market		#11, #14	2
Exhibition		#13, #14	2
Government intermediaries		#12, #13	2
Sources of Support			
Government agency/officials		#11, #12, #14	3
Friends	#15	#11, #13, #14	4
Family members	*#16		1
Full-time workers		#13	1

*Interviewee #16 does not operate his own enterprise, but makes *parang* at his uncle's government-subsidised workshop.

**Interviewee #13 did not clearly mention how she made time for her current workshop-based production alongside her role as a trainers/master craftsperson; however, it can be seen from her testimony that she demonstrates a manager role, and is less involved directly in making *dastar* as she currently has 2 full-time workers.

5.4.2.1 How do workshop producers make time for handicraft production?

For workshop producers, receiving 'supportive attitude from family', 'ability to organise own work' and 'access to networking' were often mentioned as to how they made time for handicraft production.

'Supportive attitude from family' was mentioned by three interviewees (two of them part-timers). This included receiving help from a husband in equipment preparation (#15), an uncle assisting in sales (#16) and a grand-daughter helping in production (#12). It seems that for part-time workshop producers, help from family members in production explains how they are able to continue to produce handicrafts on a part-time basis. As stated by three of them:-

> He (husband) said since I have the skill to make *dastar*, and keep receiving orders from people, why don't I make it in a proper way, place the weaving equipment and all the parts and tools in a workshop and ask my friends to join together. Furthermore, he said at least I have something beneficial to do during

> the weekend or during my free time. (#15, part-time workshop, female)
>
> I usually make and sell my *parang* through my uncle, it was bought by people who visited the workshop,I do not sell it on my own. (#16, part-time workshop, male)
>
> I need helpers to help me to weave the *dastar*. I received many orders, but I am not able to do it alone. My sight is poor. I am already old, 67 years old! Sometimes, I asked my grand-daughter and my niece to make it. (#12, full-time workshop, female)

Half of the workshop producers interviewed (three out of six) mentioned 'ability to organise their work' and 'manage time well' as to how they made time for handicraft production: two of them part-timers (#15, #16) and one full-timer (#13). Part-timer #15 mentioned that she only made handicrafts upon orders from regular customers due to lack of time to commit to handicraft production (as she was working as a teacher) and due to lack of helpers in her workshop. For part-timer #16, it seems that he made plans for production, in terms of number of days and time to be at the workshop, in order to complete products as per ordered. As for full-timer #13, it can be seen from her testimony that she held a manager role. She was less involved directly in making handicrafts as she engaged full-time helpers in her production.

> I make *dastar* upon order rather than make it all the time like my other full-time *dastar* makers. I don't have much time for that. Therefore, I will only make when I receive orders from the customers. I have my regular customers who always order from me, normally for wedding ceremony purposes. (#15, part-time workshop, female, teacher)
>
> Currently in a month, normally I will be in the workshop for six to eight days, but starting from the afternoon or in the evening. I would able to complete a set of *parang* within two days. (#16, part-time workshop, male)

The 'ability to network', mentioned by half of the workshop producers interviewed (three out of six),was quite apparent among the full-timers (#11, #14). They spoke about access to social networks, like having connection to other handicraft producers in the village (#11, #15) and suppliers for continuous production (#14), as reasons how they made time for handicraft production.

> Like for me now, I can make *parang* together with my friends in this workshop if more orders need to be fulfilled. For me, it is not because of the building itself, it is more to cooperate among the *parang* makers to produce *parang* and sell together. This ensures the availability of *parang* in the market; therefore, the demand will be still there for us. (#11, full-time workshop, male)

> Next week, there will be a craft exhibition in One Borneo Mall, they invited me too. I don't think I can go as I don't have much time to work on it. Hajah Pandian will be going. I think maybe I can place my *dastar* with her, two or three *dastar*. At least for promotional purposes.(#15, part-time workshop, female)

> It is quite difficult to get the supply for the wood recently. Luckily I know some of the *orang ulu* (people who live near the jungle) who can supply me with the wood. I need to book for it first from the *orang ulu* and they sell at RM12 for two feet lengths. We have to book earlier from them because wood is really wanted among the *parang* makers (#14, full-time workshop, male).

5.4.2.2 How do workshop producers market their handicraft products?

Nearly all the workshop producers interviewed (four out of six) mentioned 'personal order' as how they marketed their handicraft products. These producers (part-timers #15, #16 and full-timers #11 and #14) explained they sold directly to customers who came personally to their premises to place their orders. As stated by four of them:-

> Besides, there are also individuals who come to my house or this workshop and make orders from me (#11, full-time workshop, male)

> Sometimes, *hari-hari biasa* (during ordinary day), customers come here and they buy from us *terus* (right away), or they *tempah* (book) first from us and collect it some other day (#14, full-time workshop, male)

> I make *dastar* on order rather than make it all the time and then not selling them in *tamu* (weekly market) like

> my other full-time *dastar* makers (#15, part-time workshop, female)
>
> Normally my uncle will sell directly to the customers who order from him. (#16, part-time workshop, male)

Marketing through government-related events (#12, #13, #14) was often mentioned by the full-time workshop producers. Some of them said they participated in exhibitions organised by government agencies (#13, #14) and some mentioned they sold their handicrafts through government intermediaries (#12, #13). In addition, some workshop producers (mainly full-timers) mentioned they sold their handicrafts in 'weekly market' (#11, #14). As mentioned by six of them:-

> I am always invited by the government agencies to join an exhibition. Last year, I was invited by the Ministry of Cultural Heritage to take part in an exhibition, which was in Harrods, with other handicraft entrepreneurs from all over Malaysia. (#13, full-time workshop, female)
>
> Sometimes I join exhibitions. The first time I was invited by KPLB was for the Farmer's Day in Likas Bay, secondly in Tenom, then in Sipitang, Manumbuk, Lahad Datu...there are lots of places that I have been going to! (#14, full-time workshop, male)
>
> It is good to have the *Kraftangan* (MHDC) with us. I receive a permanent income. I don't have to keep my products long with me, once they are ready; they are sold (#12, full-time workshop, female)
>
> Customers come to my place, from *Pelancongan* (Sabah Tourism), they sell my products in their gift shop, *Kadaiku*, including the museum and *Kraftangan* (MHDC). (#13, full-time workshop, female)
>
> I always make *parang* every day and sell them in *tamu* (weekly market). (#11, full-time workshop, male)
>
> Every weekend we usually bring the products to *tamu* (Weekly market) (#14, full-time workshop, male).

5.4.2.3 Who helps/supports workshop producers in their current production?

'Friends' were often mentioned by almost all of the workshop producers (four out of six), mostly by full-timers, as sources of help in current production. Interviewees #11, #14 and #15 mentioned they made handicrafts with help from their friends, while interviewee #13 explained that her friend helped her find sales opportunities as well as provide her with ideas on product design. As stated by these four:-

> Usually I, with two friends, will produce *parang* together in this workshop, either using the machines or the traditional method.(#11, full-time workshop, male)

> I know Dato Irene, manager for *Pelacongan* (Sabah Tourism). We have been friends since we were children. She always invites me to craft exhibitions. She is also my regular customer for the *sembatian* shawl. She gave me the idea to weave the *sembatian* like a 'pashmina shawl'. (#13, full-time workshop, female)

> My friends and I, four of us, make *parang* (knife) in this workshop. Each of us makes our own *parang*, starting from the beginning until finishing; we engrave our own pattern on the *sarung* (*parang* cover). (#14, full-time workshop, male)

> Currently I have two friends helping me with this business. They live around here in this village too. I can say they work for me as I pay them *upah* (wage) (#15, part-time workshop, female)

Almost all full-timers (three out of four) mentioned they received help from a 'government agency' in their current production. Interviewees #11, #12 and #14 explained they received support in term of production space from the Malaysian Handicraft Development Corporation and the Ministry of Rural Development of Sabah. As they stated:-

> I receive enough support from the government to conserve this heritage craft. This workshop for example is from the *Kraftangan* (MHDC). (#11, full-time workshop, male)

> Now they (MHDC) built a *dastar* workshop beside my house. I was appointed as *Adiguru* (master craft person) and supervise the trainees in the workshop. (#12, full-time workshop, female)

> This workshop was from KPLB (Ministry of Rural Development). The KPLB supported the workshop and the equipment for making *parang*. (#14, full-time workshop, male)

It was found from the testimonies that 'family members' and 'full-time workers' were least mentioned by workshop producers. Part-timer #16 mentioned he learned how to make *parang* (machete) from his uncle, while full-timer #13 mentioned she engaged paid full-time workers in her production. As they stated:-

> I learnt to draw the pattern on the sheath from him (uncle). I think my idea in carving the pattern on the wood for *parang* cover is influenced by his idea too. He taught me a lot about different patterns. (#16, part-time workshop, male)

> Currently I have 2 full-time workers, every day they will come to my workshop to weave. I pay them per piece of cloth they make (#13, full-time workshop, female)

5.4.2.4 Summary – Current Operations of Workshop Producers

In terms of how workshop interviewees operated their current handicraft production, it was found that more part-timers than full-timers mentioned a 'supportive family' in term of encouragement and technical support (production and sales). More part-timers than full-timers also explained that they made time for handicraft production by 'organising' their work well. Nevertheless, more full-timers than part-timers mentioned that 'access to social network', like other handicraft producers and suppliers, allowed them to continue in their handicraft production.

In terms of how they marketed their products, 'personal orders' were equally mentioned by part-timers and full-timers, while 'government intermediaries', 'exhibitions' and 'weekly markets' were often mentioned by the full-timers. None of the part-timers clearly mentioned that they sold their handicrafts via these channels.

In terms of who helped or supported workshop interviewees in their current production, more full-timers than part-timers mentioned they were helped by their 'friends', especially for sales opportunities and ideas for new product design. Support from 'government agency' was also mentioned mostly by the full-timers, especially

in term of production space. Receiving support from family members was quite apparent amongst part-timers, whilst only the full-timers mentioned having full-time workers.

5.4.3 Differences between Current Operations of Domestic and Workshop Producers

In terms of how handicraft producers made time for their production, some of the interviewees, in particular the part-timers (both domestic and workshop), seemed to have an 'organising skill'. A tendency to demonstrate 'networking skill' was also shown by both domestic and workshop producers, although this was more apparent among the full-timers, when they spoke about having contact with other people for continuous production or sales. 'Family help' was mentioned more by the workshop producers (mostly part-timers) than domestic producers, when they said that they managed to make time for handicraft production because they were helped by their family members.

More domestic producers than workshop producers relied on a 'government agency' for the marketing of their handicrafts, especially through exhibitions and intermediaries, whereas 'personal order' was more often mentioned by workshop producers than domestic producers as a marketing channel. In addition, some full-time workshop producers mentioned they marketed their handicrafts through weekly market and rented craft shop. This indicates that full-time workshop producers tended to use multiple marketing channels for selling their handicrafts, compared to full-time domestic producers.

In terms of sources of help in current production, it was found that more domestic producers than workshop producers relied on 'government agencies' for assistance or incentives in their current production. More workshop producers than domestic producers mentioned they received help from 'friends' in terms of sales opportunities and ideas for product design, whereas among the domestic producers, 'other handicraft producers in their village' were often mentioned as helpers in production. Workshop producers tended to engage 'family members' and full-time workers' into their production, whereas some domestic producers seemed to make handicrafts alone, sometimes with the help of unpaid family members. This provides insight that workshop producers were more likely to have full-time permanent helpers

helping them in production, whereas domestic producers tended to have part-time temporary helpers (neighbours/villagers).

Overall, in spite of some differences, the testimonies show that workshop and domestic producers, regardless of full-time or part-time status, have many similar perceptions, experiences and behaviours towards their commercialisation. For example, both organising and networking skills were demonstrated by both workshop and domestic producers during their initial commercialisation. Also, assistance from government agencies and support from friends were mentioned by both workshop and domestic producers as their source of help/support in current production. Nevertheless, it is interesting that some producers, although exposed to similar opportunities (assistance from family/government), do not move to full-time or workshop production, but stay as part-time or domestic producers. Conversely, despite the complexity of responsibilities held by some producers, it is interesting that they managed to make handicrafts full-time or in a workshop. Therefore, the in-depth interviews further examined reasons to explain why interviewees did (or did not) move to full-time or workshop production. The following section presents other reasons for commercialisation that were drawn from the in-depth interviews based on interviewees' perceptions on person-related factors, motivation and external influences.

5.5 What Stimulates or Inhibits a Greater Level of Commercialisation in Handicraft Production?

This section discusses interviewees' perceptions of what stimulates or constrains a greater level of commercialisation, that is, it presents part-time domestic producers' perceptions of why they do not move to full-time workshop production, and full-time workshop producers' reasons for making this commitment.

5.5.1 Why do Part-time, Domestic Producers not move to Full-time or Workshop Production?

Almost half of the domestic producers interviewed (four out of ten), perceived domestic production as 'comfortable' compare to workshop production. These were mostly women, some of them part-time, and some full-time. The testimonies provided insight that for some women producers, working from home enables them

to combine their handicraft production activities with their household work and childcare responsibilities. Some domestic producers seemed to continue to make handicrafts at home for many years because they perceived that making handicrafts at home avoids disruption in their daily work or family. As stated by four of them (#2, #3, #7, #8):-

> I make it at home. It is more comfortable I think. I prefer to make it at home, it's not a heavy work actually (#2, part-time domestic, female)
>
> It is OK to weave at home, nothing is wrong with that. As for me, I am comfortable to weave at home (#3, part-time domestic, female)
>
> I make it at home. I can do the household work; I can take care of my children. These are what I like most about making craft (#7, full-time domestic, female)
>
> The weavers like to weave in their house. Because they can weave in their own time, they can even weave at night. If they produce in the government workshop, they have to be in the workshop from 8 in the morning until 5 in the evening (#8, full-time domestic, female)

In addition to comfort and flexibility, some of the part-time interviewees perceived that a 'lack of resources for production' (raw materials) prevented their involvement to a greater level of commercialisation (i.e. full-time, workshop). As stated by interviewees #1, #8:-

> At that time, I refused to join (making handicraft). It is not only about time, it is about money too, especially to buy the raw materials, the *benang* (nylon threads)? And the weaving equipment, it was not in a good condition. Some of the main tools were missing (#1, part-time domestic, female)
>
> Now I have *modal* (capital) problem. Capital to buy for the raw materials. When I was with the incubator, it was easier for me to get the raw materials because all of the raw materials were provided by the *Kraftangan* (MHDC) (#8, full-time domestic, female)

In addition, some of the domestic producers (interviewees #6, #8) perceived producing in a 'workshop as costly' as high capital is needed to build a proper production space. Some domestic producers mentioned operating in a workshop

could be realised through government assistance or subsidies. As stated by two of them:

> It requires lot of money I guess for building a workshop, unless it is subsidised by the government (#6, part-time domestic, male)

> It is good to have our own business. But for me to have my own workshop really needs quite big sum of money. If I have enough money, it would be possible to build my own workshop (#8, full-time domestic, female)

From the testimonies, one of the domestic producers mentioned that she chose to be a part-timer rather than a full-timer because she perceived that full-time or workshop production is not a worthwhile activity compared to farming. This was because the search for resources for making handicrafts is very time consuming, and involves quite challenging tasks. As she stated:-

> It is quite time consuming to search and pound the rattan nowadays. It is not worth it to devote our time to search for the rattan in the jungles when it is more worthwhile to work on our own farm and take care of the vegetables to be harvested and sold. (#2, part-time domestic, female)

In summary, for the domestic producers, there were a number of perceived advantages of home-based/part-time production and perceived disadvantages of workshop/full-time production. Some of them seemed to not move to full-time or workshop production because they perceived that domestic production is comfortable, whereas operating in a workshop is perceived as costly. Some of them also perceived lack of resources especially raw materials and production equipment as barriers to becoming more formally involved in handicraft production. Finally, one interviewee perceived that handicraft production is not worthwhile enough compared to other income generating activities like farming, as the process of making handicrafts is quite demanding.

5.5.2 Why do some Interviewees make the Commitment to Full-time, Workshop Production?

'Receiving assistance from government agencies' was often mentioned by workshop producers, mostly full-timers, as a reason why they made the commitment to workshop production. Interviewees #11, #12, #14, #16 mentioned they got involved in handicraft production full-time in a workshop when they received a subsidised workshop from the Ministry of Rural Development (KPLB) of Sabah and Malaysia Handicraft Development Corporation (MHDC). As stated by four of them:-

> But these days, when the government subsidised the workshop, it encourages more *parang* makers to get involved in this activity full time. Like for me now, I can make *parang* together with my friends in this workshop if more orders need to be fulfilled. (#11, full-time workshop, male)

> Now they (MHDC) built a *dastar* workshop beside my house. I was appointed as Adiguru (master craftperson) and supervise the trainees in the workshop. (#12, full-time workshop, female)

> This workshop was from KPLB (Ministry of Rural Development). The KPLB supported the workshop for us and the equipment for making *parang*. Datuk Salleh (former Sabah's Chief Minister) helped us for this. (#14, full-time workshop, male)

> The workshop was subsidised by the *Kraftangan* (MHDC) 4 years ago under the project of SDSI (one product one district). Currently there are ten full-time producers in this workshop making various types of *parang*. (#16, part-time workshop, male)

Some interviewees mentioned they started full-time handicraft production after attending programs organised by government agencies, like 'seminars/talks/courses' on business and production skills organised by the government (interviewee #7) and the One District One Product program (interviewee #8). Interviewee #13 mentioned she received a grant from the government for expansion and renovation of her premises. As stated by three of them:-

> I started selling my handicrafts in a handicraft centre in Kota Belud. I rented the shop from *Kraftangan* (MHDC). Then, I also applied for the business license under business registrar. I was invited to *kursus bimbingan usahawan, wanita dan keluarga*

> (entrepreneurship development, women and family course) organised by Puteri UMNO in Kota Belud. They taught me about financial management, family management, as well as business start-up. They said that we have to apply for business license in order to undergo our business easily (#7, full-time domestic, female)
>
> Then I was absorbed to SDSI (one district one product) by *Kraftangan* (MHDC). SDSI means outside incubator, we do not necessarily have to produce in a workshop or premises, but as long as we do it full-time. Like myself, now I weave the *songket* full-time though at home. (#8, full-time domestic, female)
>
> In 2005, I applied for a grant from the *kementerian pembangunan* (Ministry of Rural Development) to expand and renovate my old workshop so that it will be more comfortable for the production. I knew about it after I attended the *dialog usahawan kecil desa* (Small Rural Entrepreneur Dialogue) in Kota Belud, organised by the District Office. (#13, full-time workshop, female)

Some of the full-time producers, even though home-based, placed importance on 'having suitable professional equipment and spacious premises' for dedicated or continuous production. Interviewees #7, #8, #11, and #15 mentioned having modern and suitable production equipment to allow a faster production process. As stated by four of them:-

> Currently, I do not have *bengkel* (workshop), but I am using the space in my house, on the ground level, as the place to make the crafts. It functions like a workshop too. I have my own sewing machine. (#7, full-time domestic, female)
>
> I'm also thinking of getting a modern machine. I think it is better to use a machine compared to the *kek* method, for quicker production. I have been in *semenanjung* (west Malaysia) for the *songket* exhibition organised by the *Kraftangan* (MHDC), I saw some *songket* were weaved with the machine. (#8, full-time domestic, female)
>
> Recently, the *Kraftangan* introduced us to the modern technique to make *parang*, using a machine and computer for the whole set of *parang*. We can design, shape and cut the metal or carve the design on the wood by laser. It's a laser carving and using the computer to design the pattern. For me, this modern

> technique is good as more *parang* can be produced in shorter time. (#11, full-time workshop, male)
>
> I have two weaving machines currently in my workshop. One is from my late mother. And the other one was bought from Hajah Pandian (*dastar* maker-master craftsperson). (#15, part-time workshop, female)

Some of them mentioned having ample space for handicraft production to allow better control of the production process compared to producing at home. Interviewees #14 and #16 perceived producing *parang* (machete) in a workshop is comfortable, safe, and easier to manage for their workers. As stated by two of them:-

> I think it is suitable to make it in a workshop like this. All the blowers and grinders are placed within one building. It is easier to manage especially if we have many workers or many types of equipment. It is more comfortable. (#16, part-time workshop, male)
>
> For me, *parang* making must be done in a workshop like this. It is quite comfortable, this workshop made of bricks. We use fire to burn the knife, so it is important to have a safe place for this process. (#14, full-time workshop, male)

Some producers mentioned they operated their handicraft enterprise full-time/in workshop because of the 'availability of helpers' throughout their production. Some of them mentioned they employed their friends and former incubator students into their production as paid full-time workers (interviewees #8, #13, #15).

> I was involved with the *Kraftangan* (MHDC) program, tried to gather the former trainees from the weaving incubator, then *Kraftangan* (MHDC) and the SDSI chief gave talks to them about the potential business for the *songket* and *dastar* production. Then from there, I hired those who were interested as my workers. (#8, full-time domestic, female)
>
> Currently I have two full-time workers, every day they will come to my workshop to weave. I pay them per piece of cloth they made (#13, full-time workshop, female)
>
> Currently I have two friends helping me with this business. They live around here in this village too. I can say they work for me as I pay them *upah* (wage). (#15, part-time workshop, female)

For interviewee #7, having regular contact with other handicraft producers allowed her to outsource some of her orders to them. This allowed continuous supply to her to fulfil customer demand.

> Other than my own crafts, I bought from other people too. I told them the type of crafts and traditional costumes that I can provide to them. I have my own people to make them. Then, many people knew about my crafts, the orders were getting high. (#7, full-time domestic, female)

Finally, some of the producers who engaged in full-time/workshop production revealed that they perceived handicraft production can generate a decent income. As stated by four of them (interviewee #7, #9, #10, #11):-

> Income as a teacher with SPM (Malaysian Certificate of Education) qualification is not much, around RM1000 plus. Just enough for our basic needs. With that much of money, it is quite inadequate for me to spend extra for other things. However, when I received fixed income within 2 weeks from the craft sales, within a month I got 1000 plus, that was really good enough. (#7, full-time domestic, female)

> I have no other income, my wife is a housewife. For now, the income from *parang* making is still sufficient for my family. (#9, full-time domestic, male)

> Today, I make *parang* every day. The income is quite good, I received more than when I was a van driver. Approximately I receive RM 1200 to RM1500 every month (#10, full-time domestic, male)

> I never regret getting involved in *parang* making. It's not only meant to me as for my heritage preservation but also it provides me income from selling it (#11, full-time workshop, male)

Overall, six reasons were identified from interviewees' conversation to explain why they made the commitment to full-time or workshop production. Namely, they (i) received government assistance, (ii) had suitable production equipment, (iii) had ample space for production, (iv) had helpers in production, (v) had regular contact with other handicraft producers and (vi) perceived that handicraft production provided a decent income. Many of the full-time producers also mentioned that 'receiving government assistance' - which included being given a subsidised

workshop, being exposed to business skill development through courses, and being given financial assistance - were significant reasons that made them go full-time. It was found that some full-timers perceived the importance of 'having suitable production equipment' and 'access to social networking' facilitated them to go full-time, regardless of whether they were home-based or workshop based. In addition, some of them mentioned they were highly committed to handicraft production because they perceived handicrafts provided a 'decent income' over other alternatives. For some workshop producers nevertheless, they perceived 'having ample space for production' and 'having full-time helpers' facilitated them to operate a workshop-based production. These producers seemed to perceive the advantages of workshop production when they mentioned having a proper space or building for handicraft production, so it would be comfortable and safe. All of these reasons might facilitate some of the handicraft producers interviewed to go full-time or to engage in workshop production.

5.5.3 Summary

This section has presented factors which stimulated or inhibited the interviewees to move to a greater level of commercialisation. In terms of what makes part-time/domestic producers not move to full-time or workshop production, it was found that there are advantages in making handicrafts at home, especially in terms of comfort and convenience. Some interviewees also viewed workshop production as costly compared to domestic production, while a lack of resources (raw materials and production equipment) possibly prevents the commitment to full-time production for some part-timers. One part-timer perceived handicraft production as not a worthwhile activity compared to other income-generating activities like farming.

In terms of what makes some producers commit to full-time and/or workshop production, some full-timers - many of them workshop producers - mentioned a lot about the positive role played by related government agencies, especially in terms of subsidised-workshops and training/courses. Many full-timers also talked about having suitable/professional equipments for dedicated production, and availability of helpers in production was also mentioned by some full-timers as making their operation easier. Furthermore, unlike the part-time/domestic producers, some of

these full-timers viewed handicraft production as a worthwhile activity because it generates a decent income.

Overall, this section provides preliminary insight into why some handicraft producers undertake production as a full-time activity or in a workshop, while some undertake it only on a part-time basis and/or located at home. The testimonies have revealed a mixture of factors which influence those choices, some person-related, for example, the specific motivations or skills of the producer, some are related to producers' environment or context, for example, availability of resources and labour, family support or government support. The next section discusses all these factors in more detail, in terms of their influence on handicraft producers' choice of status and premises. The influence of these factors on performance is also considered. The discussion also draws from previous studies of factors influencing small enterprise behaviour. Overall, the aim is to generate a full, relevant list of factors influencing the status, premises and performance of handicraft producers, which can then be tested via a survey of a larger sample of handicraft producers.

5.6 Factors that Explain Handicraft Producers Status, Premises and Performance: Implications for Survey Research

In terms of factors that can influence a handicraft producer's move to greater commercialisation, it is proposed that a combination of personal and contextual factors is relevant, specifically, six categories of factor: (1) demographic factors, (2) previous business background, (3) personality characteristics, (4) personal skills, (5) motivations and (6) support context. These factors have been drawn from insights from the literature review and insights from the in-depth interviews. A full explanation of each of these sets of factors is now presented. Each of these sets of factors was taken forward for survey research.

5.6.1 Demographic Factors

Many previous studies of factors linked to the entrepreneurial process and performance contend that demographic factors like age, gender, education (Davidsson & Honig, 2003; Roberts and Robinson, 2010), family background, (Mazzarol, et al, 1999; Birley & Westhead, 1994), and living condition (Cromie,

1987, Kalantaridis & Bika, 2006; Gartner, 1985) can explain, to some extent, why some people are more likely to grow and succeed in a business. Nevertheless, the literature overall provides mixed results concerning the impact of these demographic factors on performance. Some studies contend these variables are unlikely to make a large contribution to the subsequent success of an entrepreneur and venture creation (McClelland, 1987; Lerner, et el, 1997; West & Noel, 2009; Townsend et al, 2010), while others reveal that they are significant factors in the probability of establishing a business (Rowe, et al, 1993; Mazzarol, et al, 1999; Davidsson & Honig, 2003).

Taking into account the profiles of part-time, domestic handicraft producers and those of full-time workshop producers, from the MHDC census data, it was decided to investigate age, gender and education as factors influencing levels of commercialisation of handicraft producers. In addition, type of residence and family status were also included for investigation. It was interesting to see whether producers' level of commercialisation could be influenced by family status, for example, if married women with children would be more likely to take up part-time home-based production (Gough, 2010), and earn lower sales, compared to men or women with no children.

5.6.2 Previous Business Background

Previous studies revealed that having parents who own a business and having work experience prior to owning a business (Bhagavatula, et al, 2010; Radhuan, et al, 2006, Kalantaridis & Bika, 2006, Davidsson & Honig, 2003) can positively influence entrepreneurial activities and performance. In addition, previous studies of business incubation have found that business incubator attendance provides business owners with effective business networks that help them create partnerships, recruit talented people and obtain advice from outside experts, which allows entrepreneurs to run their business successfully (Totterman, & Sten, 2005).

In the in-depth interviews, some mixed results were found about parents' business and previous experience. More full-time interviewees mentioned that their parents made handicrafts for sale, but part-time interviewees also had parents who owned businesses, although these were mostly non-handicraft, for example running a food stall or selling the farm's products in the weekly market. In terms of previous

work experience, only two interviewees had this prior to getting involved in handicraft production, but both were part-time, home-based producers. In terms of interviewees' attendance in an incubator, four of them were ex-incubatees, of which only one had taken up full-time handicraft production. Notwithstanding these mixed results, it was decided to include factors relating to the personal background of handicraft producers in the survey. Specifically, the following factors were included for further investigation: attendance at an incubator, parental entrepreneurship, and previous employment prior to handicraft production.

5.6.3 Personality characteristics

Personality characteristics can be defined as the inherent disposition or aptitude of an individual as the result of interaction between natural and environmental factors. From the literature and in-depth interviews, four traits are proposed relevant to handicraft producers' level of commercialisation: (1) self-confidence, (2) self-reliance, (3) perseverance and (4) achievement orientation. McClelland (1987) identifies self-confidence as one trait linked to successful entrepreneurs. In the in-depth interviews, more full-time interviewees than part-time interviewees demonstrated a belief that they could pursue what they wanted to do. For example, some full-time producers talked about how they could complete a task or meet a challenge, for example make handicrafts, even though they were juggling with household work, lack of resources, and lack of skills to move further in the production. Some part-time producers showed less confidence when they talked about not having enough knowledge in business and when they said only those who have adequate business knowledge are able to take up full-time or workshop-based production. It was decided to include self-confidence as a personal characteristic in the survey, to test whether handicraft producers who take up full-time/workshop-based production, and/or are high performing, have higher self-confidence than those who produce part-time/home-based.

Previous studies also contend that self-reliance has a direct impact on business performance (Lee & Tsang, 2001). It was found in the interviews that some producers described themselves as 'preferring to do things on their own, rather than rely on other people' while others said they always 'believe in fate' when talking

about the outcomes of daily decisions. The in-depth interviews found that full-time producers talked more about independence in doing things, for example, using their own savings to start a business rather than rely on government subsidies. For some part-time interviewees, they decided to engage in handicraft production after being offered assistance from government agencies. Therefore, self-reliance was included as a trait in the survey, to test whether producers with a high level of self-reliance are more likely to have a greater level of commercialisation, i.e. full-time, workshop-based production, and/or be high performing.

Perseverance refers to a trait that involves sustained goal-directed action and energy even when faced with obstacles (Gartner, 1991 in Baum & Locke, 2004). In the in-depth interviews, some producers revealed they will not give up when they face challenges in their business, for example handling customers' complaints or critiques, continuing to learn to weave though they found it difficult, and selling their handicrafts through different sales outlets when they found their handicrafts had not been sold. Although there is lack of literature on the impact of perseverance on business transition and performance, a few studies contend that entrepreneurs who hold persistently to their goals and who hate to give up increase their chances of start-up survival (Timmons, 1985). It is possible that in handicraft production, perseverance might sustain a producer's decision to move to full-time, produce in a workshop or it may help to achieve high performance. Therefore, perseverance was included as a factor for investigation in the survey. Previous studies of entrepreneurial behaviour have found a positive correlation between the achievement orientation of entrepreneurs and the growth rate of their firms (Lee & Tsang, 2001). The in-depth interviews revealed that some producers are goal-oriented, for example when they talked about making plans and ensuring high quality work in order to succeed in their business. More full-time/workshop-based producers talked about their plans to further their current production. Therefore, achievement orientation was included as a personal trait in the survey, to test whether handicraft producers who are achievement-oriented have a greater level of commercialisation, and/or are higher performing, compared to those who are not.

5.6.4 Personal skills

Previous studies identify that an entrepreneur's level of business skills has an important impact on business performance, particularly revenues and profitability (Lerner, et al, 1997; Davidsson & Honig, 2003). In the in-depth interviews, a range of skills was discussed by the interviewees. Some of them referred to organising and planning skills when they talked about how they managed their daily activities to commit to handicraft production. Others referred to social networking skills when they talked about having contact with friends, customers, middlemen and government agencies to get better sales opportunities. Others referred to basic accounting or bookkeeping skills, when they explained about the pricing of their handicrafts. Therefore, all of these skills were considered relevant to investigate further: (1) technical and production skill, (2) organising skill, (3) networking skill and (4) accounting skill. The next sections discuss these in more detail. In relation to technical/production skills, the in-depth interviews revealed different levels of mechanisation between part-time domestic producers and full-time workshop producers. Mechanisation is linked to efficient production, and lower costs. Interviewees who used mechanisation also talked positively about obtaining consistent quality in their production. So there may be a link between type of production and performance. Therefore, production skills were included for investigation in the survey.

In terms of organising skills, in the in-depth interviews some producers talked about how they organised their current operations, for example in terms of division of time and work, outsourcing their production, and deciding on the budgets for production including the cost of raw materials and quantity of products to produce. But part-time home-based producers, especially producers who juggle household work or other jobs, spoke a lot about organising their work and managing their time to allow them to continue their handicraft production, although in a less formal way. So the link between good organising skills and status/premises is not so clear. Part-time, home-based producers may need to demonstrate these skills more, because they need to. Anyway, organising skills were chosen as relevant to include in the survey.

In relation to networking skills, previous studies show that social networks of entrepreneurs, either formal or informal ties (Low & McMillan, 1988), can play a

significant role in business performance, because they are linked to better resource acquisition or sales opportunities (Watson, 2007; Bhagavathula, et al, 2010). In the in-depth interviews, more full-time interviewees, especially workshop-based ones, demonstrated networking skills compared with part-time producers. Workshop producers talked about relying on close ties, and being involved in collective activity in production and sales, such as membership of a trade organization or government incubator, in order to get better sales opportunities. Besides, having a good network and communication with customers, suppliers and other producers, as well as ability to outsource production to other producers were also mentioned by producers themselves as important skills that allowed them to continue in their business. Networking skills were included in the survey, to test whether full-time workshop producers demonstrate stronger networking skills than part-time domestic producers, and whether this contributes to high performance.

In terms of accounting skills, previous studies of growth in small businesses contend that low performing firms tend to use simple accounting approaches and do not prepare formal bookkeeping compared to high performing firms (Holmes & Zimmer, 1994). The in-depth interviews showed that some producers apply basic costing and accounting procedures when they calculate their profit and savings in order to buy additional raw materials, as well as when they consider the types of raw materials to be used, and pattern designs, when setting prices. A full-time workshop interviewee explained that although she did not know how to practice formal bookkeeping, she still managed to run her business successfully through simple costing. In line with this, accounting skills were included in the survey, with the proposal that full-time/workshop producers are more likely to possess greater levels of these skills than part-time/home-based producers, and that these skills are also linked to higher performance.

In summary, it is proposed that full-time workshop producers are more likely to have greater levels of technical and production skills, networking skills and accounting skills compared to part-time domestic producers, and these skills are also expected to be related to enterprise performance. The link between organising skills and status, premises and performance is proposed to be less clear, because part-time, domestic producers need to have these skills to manage their different commitments.

5.6.5 Motivations

Previous studies of entrepreneurs' motivations contend that the type of motivation or goal can influence how individuals move from one state to another (Cooper, 1981; Cromie, 1987), and can also explain subsequent income and profitability levels of the business (Lerner, et al 1997). In the in-depth interviews, producers were found to have both internal and external motivations for their involvement in handicraft production, namely: (1) income supplementation, (2) income maximization, (3) passion for handicraft, (3) cultural preservation, (4) family and friends influence and (5) independence. Income supplementation was a common motivation among part-time interviewees with lower levels of sales turnover. For these producers, handicraft production provided a way of getting additional income to the main household income, to support the family. The motivation was not to make as much money as possible from the handicraft enterprise, as other jobs or chores were seen as more important. Income supplementation motivation is included for the survey research, to test whether producers motivated by income supplementation are more likely to produce handicraft part-time/at home, and show lower incomes.

In relation to income maximisation as the second motivation, previous studies of entrepreneurial motivations propose that an income maximisation motive is strongly linked to high growth and performance (Cooper, 1981; Cromie, 1987). In the in-depth interviews, income maximisation, as a motive, was mentioned more by full-time interviewees with high levels of sales turnover. Therefore, it is proposed that handicraft producers with income maximisation motives are more likely to operate their handicraft production full-time, and be high performing.

The third type of motivation is passion for handicraft. Previous studies contend that passion for work is related to business growth (Baum & Locke, 2004). In the in-depth interviews, some producers said they loved and enjoyed making handicrafts, not just when receiving orders, but also during their free time. In fact, it was found that more full-time/domestic producers (with both low and high sales turnover) talked about their passion for making handicrafts as the reason why they started and continued in handicraft production. Therefore, 'passion for handicraft' is included in

the survey, to test whether those with greater passion for handicraft are more likely to be home-based and low performing.

Previous literature on handicraft production emphasises that producers in handicraft sectors are often involved in handicraft production less for profit maximisation and financial growth, and more for reasons of preserving cultural identity and continuing the handicraft tradition (Paige & Littrell, 2002; Berma, 2001). The in-depth interviews revealed that more full-time (though home-based) producers, mostly with high level of sales turnover, spoke of continuing to make handicrafts not just for sale, but to practice and preserve their heritage. For these interviewees, it seemed there was no conflict between cultural preservation motivation and strong performance. Cultural preservation motivation was included for the survey, to test whether producers who perceive cultural preservation as motivation are more likely to be full-time and high performing.

The fifth type of motivation is influence from family and friends. Previous studies contend that relatives and close friends increase the probability of self-employment, in other words, to own a business (Davidsson & Honig, 2003; Bhagavatula, 2010). Family and friends can provide examples that entrepreneurs can be motivated to follow. The in-depth interviews revealed that more part-time home-based producers (although mainly with a high level of sales turnover) talked about the influence of family and friends during their initial start-up. For example, one spoke of being inspired by her mother to continue the tradition of making handicrafts, another spoke of following the example of elderly people or skilled handcraft makers in her village. Therefore, for the survey it is proposed that those who are highly motivated by family and friends are more likely to be part-time/home-based, and may have a higher income.

With regards to independence as a motivation, many studies have found that ‘to be independent or own boss’ is a key reason for start-up amongst owner-managers of small businesses (Begley & Boyd, 1987; Birley & Westhead, 1994). Nevertheless, it has also been argued that ‘need for independence’ or ‘control over own life’ without outside parties may prevent entrepreneurs from taking their business activities to a greater level of performance (Holmes & Zimmer, 1994). In the in-depth interviews, some interviewees talked about their deliberate choice to make handicrafts in their

own house or private workshop, instead of in government workshop, because they liked to be independent. These interviewees tended to be full-time and with high sales turnover. Therefore for the survey, it is proposed that an independence motivation is related to full-time status and high performance. There may also be differences between handicraft producers with private premises and those with government supported workshops, in terms of their motivations.

5.6.6 Support Context

Support contexts refer to those factors in handicraft producers' immediate environment that are influential in shaping and supporting their decisions about how to run their enterprises. The literature on entrepreneurial development emphasises that person-related factors, alone, do not fully explain how enterprises grow, these have to be considered alongside factors in the founder's environment, resources and process (Frank, et al, 2007). A supportive upbringing, role models, family restrictions, financial situation, as well as contact with related government agencies can help to explain why some enterprises grow and others do not (Davidsson & Honig, 2003).

Based on the in-depth interviews, seven support context variables were found to be relevant to the status, premises and performance of the interviewees, namely: (1) emotional and technical support from family and friends, (2) support from government agencies, (3) access to finance, (4) access to reliable workers, (5) access to raw materials, (6) access to sales opportunities and (7) flexibility of time. Previous studies have found that close friends and family can provide entrepreneurs with secure and consistent access to resources, access to new markets and a source of skills (Davidsson & Honig, 2003; Rodriguez, et al, 2009). The in-depth interviews revealed the importance of family (parents, spouse, and other relatives) and friends to interviewees, in terms of providing technical support like craft-making skills or ideas for product design during initial commercialisation. Some of them also mentioned that they received emotional support, for example from their parents or spouse, which influenced them to make handicraft full-time or in a workshop. In fact, more full-time, workshop-based interviewees spoke of the emotional and technical supports they received from family and friends throughout their handicraft

production. Therefore, it is proposed that handicraft producers receiving greater emotional or technical support from family and friends are more likely to be full-time/workshop-based and high performing.

Previous studies of small business performance propose that government support, for example through provision of subsidies of raw materials and machinery, production space, and training facilities are influential in business formation and subsequent success (Begley, et al, 2005; Kader, et al, 2009). Cooper (1981) proposes that the presence of personnel and support services from government agencies positively influenced future entrepreneurship and firm growth. In the in-depth interviews, 'government support' was often mentioned by part-time, home-based producers, especially during their initial commercialisation. Most of these producers earned lower sales turnover. They said the provision of raw materials and equipment, production space, and technical/business knowledge from the MHDC and KPLB (ministry of rural and development) incubator helped them in their initial commercialisation process. For the survey research, it is proposed that the availability of support from government agencies is related to greater levels of commercialisation and performance.

Various researchers have found that acquiring capital and dealing with financial institutions is difficult for small business owners especially in rural areas (Berma, 2001; Chan, 2005), due to the need for document preparation to apply for financial assistance. Small business owners often depend on informal sources of finance such as personal savings and loans from family and friends. The in-depth interviews revealed that some producers had difficulties in getting financial support during their initial commercialisation, for example to buy raw materials and equipment. One full-time domestic producer said she applied for a loan from an illegal credit provider during initial commercialisation process in order to buy raw materials and weaving equipment, because applying for a loan from banks is difficult. This lack of access to legitimate finance options creates barriers and delays in growth. For the survey, it is proposed that accessible financial support is important for producers to get involved in handicraft production whether they are full-time or part-time.

Previous studies suggest that the number of employees hired in an enterprise is one of the most significant predictors of non-home-based operation (Roberts &

Robinson, 2010). Gartner (1985) outlined presence of a technically-skilled labour force as one of the variables in new venture creation. So the ability to hire employees is linked to small firm premises type and growth. In the in-depth interviews, some producers had difficulties in getting young workers, and this was a problem for continuous production. Some producers faced a problem of run-away workers which affected the production activity. Many of the full-time workshop interviewees with high incomes perceived workers are needed if a producer would like to achieve a greater level of commercialisation. Therefore, access to reliable workers is expected to be related to full-time handicraft production and also to high performance.

Access to raw materials also seems important to handicraft enterprise growth and development. In interviewees' testimonies, the need for machinery and raw materials was widely mentioned, particularly by home-based producers (with both low and high sales turnover), as essential for achieving a greater level of commercialisation. Some producers said they delayed their involvement in handicraft production when they had difficulties in getting raw materials or when they did not possess suitable production equipment. Therefore, it is expected that those having enough support in term of access to raw materials and equipment are more likely to be full-time, workshop-based and high performing.

Access to sales opportunities is another factor that was found relevant in the in-depth interviews. Interviewees mentioned various ways to achieve better sales opportunities, such as having contact with other people like friends and middleman, or getting involved in trade fairs, events and exhibitions organised by government agencies, which allow promotion of their products. Therefore, it is proposed that access to sales opportunities is an important external support to producers for a greater level of commercialisation, i.e. full-time, workshop-based production and high performance.

Cromie (1987) found that employment with flexible hours and a comfortable work place can encourage job engagement. In the in-depth interviews, some producers, especially married women with children, mostly part-time, home-based, preferred to make handicrafts at home because this was a flexible, comfortable way to earn some money whilst juggling their household work. In addition, some of the full-time interviewees explained that making handicrafts allowed them the flexibility

to earn as much income as they wanted rather than working for someone else. Therefore, although 'flexibility' seemed to be mentioned a lot by part-time, home-based, low performing interviewees, some full-timers also mentioned flexibility as a reason why they had pursued a greater level of commercialisation. 'Flexibility of time for handicraft production' was taken forward for the survey research, therefore, although the specific relationship to status and performance is not clear.

5.7 Summary

This chapter has reported the results of the in-depth interviews with handicraft producers in Kota Belud, Sabah, and has drawn together the findings to propose a list of factors potentially influential to the status, premises and performance of handicraft producers, to be tested by survey research. In-depth interview results show that domestic and workshop-based producers go through different processes of commercialisation, and rely on different sources of help and support. Domestic producers perceive advantages of flexibility and convenience in producing at home, and perceive capital investment and skills as barriers to further commercialisation. Government support is an important factor in explaining why some producers set up workshop-based production, along with other reasons. Overall, the in-depth interviews, together with insights from previous studies, led to the identification of five sets of factors that may influence the status, premises and performance of handicraft producers: producers' background, personality traits, motivations, skills and support contexts. The findings from this fieldwork served as a basis for the development of a questionnaire for the next fieldwork, a large-scale survey. The next chapter presents the results of this survey.

Chapter 6 Results of Survey of Handicraft Producers in Sabah, Malaysia

6.1 Introduction

The previous chapter reported the results of the in-depth interviews with handicraft producers, revealing why domestic producers chose not to start workshop production, and how workshop producers had made the move to workshop production. The chapter finished with a summary of proposed factors that may have an influence on handicraft producers' performance and/or their level of commercialisation. The in-depth interviews gave interesting insights, but because of the small sample, some questions remain. For example, some domestic interviewees had higher incomes than some workshop producers, and some part-time producers performed better than full-time producers. But the in-depth interviews cannot identify the existence of these producers across a larger population, or how producers' status, premises and performance are related, or the factors that influence them. This chapter presents the results of the large-scale survey that was conducted to address these questions. Specifically, the survey had the following objectives:-

i. to investigate, in a large sample, handicraft producers' production status (full-time or part-time), premises (domestic or workshop) and performance levels, and to examine the relationship between these.
ii. to investigate, handicraft producers' backgrounds, personalities, motivations, skills and support contexts.
iii. to investigate the relationship between handicraft producers' status, premises and performance, and the person-related and contextual factors described in (ii), to identify whether any of these factors have a significantly different relationship to handicraft producers' status, premises and performance.

The present chapter proceeds as follows. First (section 6.2) the sample profile is reported in terms of the status, premises and performance of the respondents, together with results of bivariate tests to explore the relationship between these three key variables. Next, in sections 6.3 to 6.6, the profile of the sample is presented in terms of respondents' demographics, backgrounds, support contexts and traits, together with results of bivariate analyses which tested the relationship of these factors to producers' status, premises and performance. After a summary of the key

points from these results (section 6.7), the chapter then presents the methods and results of a cluster analysis of respondents, designed to explore the relationship between respondents' status, premises and performance in a multivariate way (section 6.8). Having derived clusters of respondents, the chapter concludes with the results of One-Way ANOVA tests (Section 6.9) which sought to identify which traits, skills, motivations and contexts are significantly related to cluster membership. Finally, Section 6.10 summarises the chapter.

6.2 Key Indicators of Sample: Respondents' Status, Premises and Performance

As the first objective of the survey was to gain knowledge about handicraft producers' status, premises and performance, and the relationship between these variables, the chapter starts with reporting the descriptive results in terms of these variables. It also presents the results of bivariate tests to explore the relationship between them.

6.2.1 Respondents' Status: Full-time or Part-time

Respondents were asked directly whether they made handicrafts as a full-time or part-time activity. Table 6.1 shows that the handicraft producers surveyed were mainly part-time producers (61 percent), while 39 percent of them were full-time producers.

Table 6.1: *Respondents' Production Status (n=210)*

	n	%
Full-time	82	39
Part-time	128	61
Total	210	100

Although the proportion of part-time producers in the survey is greater than Malaysian Handicraft Development Corporation census profile (2008) for Kota Belud district only, it is comparable to the proportion of full-time and part-time producers reported in the larger census for the whole of Sabah.

6.2.2 Respondents' Production Premises: Workshop or Home-based

Respondents were asked directly what kind of premises they used to make handicrafts. Drawing from insights about premises generated from the qualitative

research, four response categories were used: (1) own home, (2) privately-owned workshop, (3) government workshop and (4) neighbour's house. As the survey was run, a new category was added as several respondents mentioned their parent's house as their production location. Table 6.2 shows the results.

Table 6.2: *Respondents' Production Premises (n=210)*

	n	%
Own home	112	53
Government workshop	45	21
Own workshop	38	18
Neighbour's house	8	4
Parent's house	7	3
Total	210	100

It can be seen that the largest proportion of survey respondents produced their products domestically (53 percent). Following this, 21 percent of them produced in a government workshop and 18 percent produced in their privately-owned workshop. The proportion of domestic producers in the survey is not as much as in the Malaysian Handicraft Development Corporation (2008) census, where 93 percent out of 682 handicraft producers in Kota Belud were recorded as domestic producers.

Respondents were also asked to indicate the main reason for using their preferred premises. Table 6.3 gives the results.

Table 6.3: *Respondents' Main Reason for Producing at their Preferred Premises (n=210)*

	Own home	Govt workshop	Own workshop	Neighbours' house	Parent's house	Total
Family commitments	29	0	0	0	0	29 (14%)
Convenient in term of time	23	1	2	0	0	26 (12%)
Inherited parent's business	35	1	10	0	3	49 (23%)
Involve low cash capital	6	17	1	2	0	26 (12%)
Government subsidised it	0	14	2	1	0	17 (8%)
Comfortable to produce	18	11	17	2	4	52 (25%)
Suitable for collective work	1	1	6	3	0	11 (5%)
Total	112	45	38	8	7	210 (100%)

There are some big differences in the reasons why producers use different premises. For home-based respondents, the most common reasons related to family circumstances, either from inheriting a home-based business, or through home being convenient for dealing with family commitments. For workshop producers, the greatest single proportion chose a workshop location because of comfort and ease of production. Interestingly, respondents with a government workshop strongly gave financial reasons for choosing this location – low start-up costs. These differences in choice of location give a first indication of the different concerns and motivations of producers according to their premises.

6.2.3 Respondents' Performance: Sales Turnover and Profit

This section presents the results relating to the performance of respondents' enterprises. Two key measures were asked: (1) estimated average annual sales turnover and (2) estimated annual profits. First, respondents were asked to estimate in Ringgit Malaysia (RM) their total sales turnover for 2007 and 2010, defined as the total income they received from selling their own handicrafts before deductions for costs or tax. The raw figures obtained from this question were then re-coded and grouped into eight categories ranging from 'less than RM 1,000' to 'RM 30,000 and above'. Table 6.4 shows the results.

Table 6.4: *Respondents' Sales Turnover for year 2007 and 2010 (n=210)*

Sales Turnover (in Ringgit Malaysia)	Year 2007		Year 2010	
	n	%	n	%
Less than 1,000	15	7	12	6
1,000 – 4,999	91	43	84	40
5,000 – 9,999	59	28	64	31
10,000 – 14,999	23	11	21	10
15,000 – 19,999	6	3	11	5.2
20,000 – 24,999	4	2	7	3
25,000 – 29,999	8	4	2	1
More than 30,000	4	2	9	4
Total	210	100	210	100

It can be seen that half of all respondents earned less than RM 5,000 in 2007 (50 percent) and 2010 (46 percent). These proportions are lower than in the MHDC census data (2008) where 64 percent out of 682 handicraft producers in Kota Belud

earned annual sales less than RM 5,000. The difference may be because a greater proportion of respondents to this survey are workshop-based. Beyond this, it the vast majority of remaining producers generated between RM 5,000 and RM 15,000 (41 percent in 2007, 43 percent in 2010). As reported by the Malaysia Statistics Department (2007), the average monthly gross household income for rural Sabah is RM 23,000 per year. In addition, the mean low income level for rural areas is RM 12,000, the middle income level is RM 25,000 and the high income level is RM 62,000. Therefore, in relation to this survey, it can be said that respondents who earned less than RM 15,000 could be considered as low income group, which constituted 86 percent of the respondents surveyed. Only a very small proportion of respondents earned higher sales levels between RM 15,000 and RM 30,000. These could be considered as a middle income group. Only a tiny proportion of respondents have a high income level, i.e. with turnovers of more than RM 30,000. This level is comparable to income earned by professionals (Malaysia Statistics Department, 2007).

The second measure of performance investigated was profit level, expressed as a percentage of sales turnover. Respondents were asked to estimate the profit they received from selling their own handicrafts in the current year (2010) and 2007. They were asked to provide the answer in percentages, rather than in RM, as the pilot study showed this would give a better likelihood of response. The raw percentages obtained from this question were re-coded and grouped into six categories, ranging from ‘less than 31 percent’ to ‘71 percent and above’ (Table 6.5).

Table 6.5: *Estimated Percentage of Profit for year 2007 and 2010 (n=210)*

Percentage of Profit (%)	Year 2007 (n=210)		Year 2010 (n=210)	
	n	%	n	%
30 and less	10	5	1	0.5
31 – 40	25	12	6	3
41 – 50	73	35	45	21
51 – 60	67	32	86	41
61 – 70	35	17	58	28
71 and above	-	-	14	7
Total	210	100	210	100

In both 2007 and 2010, approximately two thirds of all respondents earned 41% to 60% profit. The proportion which earned more than 61% of profits doubled from 2007 to 2010, whilst those generating profit less than 40% fell from 17 percent to 3.5 percent. Overall, the results on performance reveal that although the majority of respondents to this survey generated very low sales turnovers, the profit they achieve from sales is substantial.

6.2.4 Bivariate Analysis of Respondents' Status and Premises with Performance

So far, the survey has shown that the majority (61 percent) of respondents are part-time producers, 60 percent produce handicraft at home and 40 percent produce in a workshop. In terms of performance, close to half of all respondents generate a very low sales turnover of less than RM 5,000. At the upper end, a very small proportion of respondents generate a gross income equivalent to professional and managerial jobs. Overall, respondents generate substantial profit levels. But what is the relationship between respondents' status, premises and performance? In particular, are the respondents with high gross incomes more likely to be full-time and/or based in workshops, as some theory suggests? To address this question, bivariate analysis was performed on the data, first cross-tabulating performance with status, and then with premises. Tables 6.6 (a and b) and 6.7 (a and b) show the results, respectively.

Table 6.6a: *Cross-tabulation of Respondents' Sales Turnover with Status (n=210)*

Sales Turnover, 2010 (in Ringgit Malaysia)	**Status of Producers**				**Chi-squared Test**
	Part-time (n=128)		**Full-time (n=82)**		
	n	%	n	%	
Less than 5,000	65	51	31	38	χ^2=35.821, p<0.001
5,000 to 9,999	48	38	16	20	
10,000 to 14,999	10	8	11	13	
15,000 to 19,999	2	2	9	11	
20,000 and above	3	2	15	18	
Total	128	100	82	100	

Table 6.6b: *Cross-tabulation of Respondents' Profits with Status (n=210)*

Percentage of Profit from Sales (%)	**Status of Producers**				**Chi-squared Test**
	Part-time (n=128)		**Full-time (n=82)**		
	n	%	n	%	
40% and less	6	5	1	1	χ^2=10.748, P<0.05
41% to 50%	30	23	15	18	
51% to 60%	58	45	28	34	
61% and above	34	27	38	46	
Total	128	100	82	100	

In terms of the relationship between sales turnover and status, Table 6.6a shows 89 percent of part-time producers generated less than RM 10,000 compared with 58 percent of full-time producers, while at the upper end, a much greater proportion of full-time producers (42 percent) than part-time producers (12 percent) generated sales of RM10,000 and more. Chi-squared test confirmed these differences are significant (χ^2=35.821, p<0.001). This result supports the theory proposition that full-time producers are likely to be higher performing, although it is surprising that more than half of full-time producers generate very low sales. It might be that a lack of business, technical skills or external supports are reasons why these respondents earned less than RM 10,000. In terms of the relationship between profit levels and status (Table 6.6b), the results are quite clear, with a greater proportion of full-time producers generating profits of 60% and above. Chi-squared test confirms the difference in profit levels between the two groups is significant (χ^2=10.748, p<0.05).

Table 6.7a: *Cross-tabulation of Respondents' Sales Turnover with Premises (n=210)*

Sales Turnover (in Ringgit Malaysia)	Premises					Chi-Squared Test
	Own home (n=112)	Own workshop (n=38)	Government workshop (n=45)	Neighbour's house (n=8)	Parent's house (n=7)	
Less than 5,000	60 (54%)	13 (34%)	16 (36%)	5 (63%)	2 (29%)	χ^2=46.496, p<0.01
5,000 to 9,999	32 (29%)	5 (13%)	20 (44%)	3 (38%)	4 (57%)	
10,000 to 14,999	12 (11%)	4 (11%)	5 (11%)	0	0	
15,000 to 19,999	6 (5%)	4 (11%)	1 (2%)	0	0	
20,000 and above	2 (2%)	12 (32%)	3 (7%)	0	1 (14%)	

Table 6.7b: *Cross-tabulation of Respondents' Profit with Premises (n=210)*

Percentage of Profit from Sales	Premises					Chi-Squared Test
	Own home (n=112)	Own workshop (n=38)	Government workshop (n=45)	Neighbour's house (n=8)	Parent's house (n=7)	
40% and less	4 (4%)	1 (3%)	1 (2%)	0	1 (14%)	χ^2=32.064, p<0.05
41% to 50%	17 (15%)	4 (11%)	16 (36%)	6 (75%)	2 (29%)	
51% to 60%	55 (49%)	15 (39%)	11 (24%)	2 (25%)	3 (43%)	
61% and above	36 (32%)	18 (47%)	17 (38%)	0	1 (14%)	

In terms of the relationship between sales turnover and premises, Table 6.7a shows that the proportions of domestic and workshop producers with medium levels of sales (RM 5,000 to RM 19,999) are quite similar, but half of domestic producers generate less than RM 5,000 compared with only a third of workshop producers. At the upper end, only two percent of domestic producers generate RM 20,000 and above, compared with 18 percent of workshop producers (combination of both own workshop and government workshop). Chi-squared analysis confirms these differences are significant (χ^2=46.496, p<0.01). This result supports the theory proposition that higher performing producers tend to be workshop-based. Table 6.7b, however, shows a less clear result in terms of the relationship between profit level and premises. Only a third of domestic producers generate the highest profit levels (61% and above) compared with 42 percent of workshop producers, but more domestic than workshop producers reported profits of 51 to 60%, and more workshop than domestic producers reported profits of less than 50%. Chi-squared test confirms that the differences between the two groups are significant (χ^2=32.064, p<0.05), but the interpretation is not straight forward. The result, however, does not seem to support the proposition that workshop producers have higher performance.

Overall, the results on the relationship between respondents' status, premises and performance are not very consistent. Some of the results support the theory proposition that full-time, workshop-based producers are higher performing, but there is a lack of clear difference between the profit levels of domestic and workshop producers, and a surprisingly high proportion of full-time producers with low sales turnover. The results suggest a need to investigate the relationship between status,

premises and performance in a multivariate way, which is presented later in the Chapter. First, the chapter continues with reporting of descriptive results from the survey, by presenting the profile of respondents in terms of their demographic characteristics, backgrounds, traits and support contexts. Throughout these sections, crosstabs are conducted to investigate the relationship between these factors and respondents' status, premises and performance.

6.3 Profile of Respondents and their Enterprises

Existing studies of the factors linked to the entrepreneurial process and small firm performance have found that demographic factors like age, gender, education (Davidson & Honig, 2003; Roberts and Robinson, 2010), family background (Mazzarol, et al, 1999; Birley & Westhead, 1994), living conditions and occupational background (Cromie, 1987, Kalantaridis & Bika, 2006;Gartner, 1985) can influence individuals' success likelihood in a business. In addition, the in-depth interviews found that producers' personal background could influence their full-time/part-time status or their choice of premises. Therefore, in the survey respondents were asked some questions about themselves and their enterprises, to investigate whether these factors were related to respondents' status, premises or performance.

6.3.1 Demographic Profile of Respondents

Table 6.8 shows the profile of the survey respondents themselves. In terms of age, Table 6.8 shows the respondents are mainly middle aged - nearly half are 30 to 49 years, and only 16 percent are less than 29 years. This profile matches the MHDC census (2008). Chi-squared tests were performed to investigate whether the respondents' age differed significantly according to their full-time/part-time status, domestic/workshop premises or their performance level (using the measures of 2010 sales turnover and 2010 profits). These revealed significant differences between respondents' age and their status (χ^2=11.169, p<0.05), premises (χ^2=37.845, p<0.001), and profit levels (χ^2=26.495, p<0.01). Specifically, older producers tended to be part-time and domestic, but earned higher profit levels compared to younger respondents. This result could be because older producers use part-time domestic

production to fit in with their family responsibilities. It may be they achieve higher profit levels because of their greater experience relative to younger respondents.

Table 6.8: *Demographic Profile of Respondents (n=210)*

Demographic Characteristics		N	%
Age	29 and below	33	16
	30 to 49	100	48
	50 to 69	71	34
	70 and above	6	3
Gender	Female	162	77
	Male	48	23
Education level	No formal schooling	24	11
	Finished primary school	67	32
	Finished secondary school	105	50
	Certificate/diploma	13	6
	Degree	1	1
Residence	Wooden house	163	78
	Brick house	47	22
Family status	Married with no children	6	3
	Married with children	155	74
	Single/unmarried/widowed with no children	36	17
	Single/unmarried/widowed with children	13	6

In terms of gender, Table 6.8 shows the sample is three quarters female. This profile accords with the MHDC census (2008). Chi-squared tests were performed to test for any significant differences in the gender of producers according to their status, premises and performance levels. It was found that there was a significant difference in terms of production premises (χ^2=11.223, p<0.05), namely more domestic producers were female and more workshop producers were male. It is likely that home-based enterprises are mainly operated by women as it enables them to combine income generating activities with their household responsibilities. As the men engage more in repairs, wood and metal making, these tend to take place in a workshop or dedicated premises (Gough, 2009; Tipple, 1993).

In terms of respondents' educational level, half the sample had completed secondary education, although nearly one-third had only finished primary education and 11 percent had received no formal schooling. This profile accords with Malaysia

Labour Force Statistics as reported by the Malaysia Statistic Department (2008). These show that more than half of employed persons in Malaysia have secondary education, followed by tertiary education (22 percent), primary education (18 percent) and five percent with no formal education. Similarly, an earlier study on SMEs in [1]Kelantan region, west Malaysia, indicated that three quarters of owners of selected micro-sized SMEs had obtained secondary school qualifications (Yusoff, Yaacob & Ibrahim, 2010). Chi-squared tests revealed that respondents' education level was significantly related to premises (χ^2=36.972, p<0.01) and sales turnover (χ^2=44.626, p<0.01). Namely, a greater proportion of respondents who had finished secondary school and upper level education produced their handicrafts in a workshop, compared to those who had no formal schooling. A higher level of education might give producers better knowledge of operating handicraft production in a more commercialised way, which encourages them towards proper premises. In terms of sales turnover, it was found that the greatest proportion of respondents who finished secondary school earned more than RM 20,000, whereas more respondents who completed only primary education earned less than RM 5,000.

Finally, in terms of profile, respondents were asked about their domestic circumstances, namely, where they lived (brick or wooden house) and their family status (marital status and dependents). Table 6.8 shows that over three quarters of the respondents lived in a wooden house, which implies only a low to moderate standard of living. Gartner (1985) proposed that living conditions are one of the variables of successful new ventures, whilst Kodithuwakku and Rosa (2002) used individuals' social standing (in terms of wealth and income) as one of the variables to distinguish between successful and less successful entrepreneurs. These results are supported in the current survey - a Chi-squared test revealed that type of house is significantly related to sales turnover (χ^2=19.366, p<0.01) and profit (χ^2=10.804, p<0.05). Specifically, those in brick houses were more likely to report high sales and profit levels than respondents in wooden houses.

Regarding respondents' family status, Table 6.8 shows that three quarters of respondents were married with children. Small proportions of them were single with

[1]Region with the second highest poverty rate after Sabah, the lowest gross income in Malaysia, with 60 percent of the populations live in rural area.

no children (17 percent), single with children (6 percent) and married with no children (3 percent). It would be logical to propose a link between the family status of respondents and the choice of so many to undertake in part-time, domestic production. In the in-depth interviews, interviewees described the convenience of home-based production given their domestic circumstances. Nevertheless, Chi-square tests revealed no significant relationship between respondents' family status and their full-time/part-time status, premises or performance. It was quite surprising that marriage and dependents did not appear to influence these things. Perhaps some women are able to produce full-time, and/or outside their home, notwithstanding their family responsibilities, because they have the support of friends or other family members. An alternative explanation is that the original question to respondents did not discriminate between young children or dependents which require a lot of time and effort, and older children and respondents who require less time and effort.

6.3.2 Profile of Respondents' Enterprises

This section presents the characteristics of respondents' enterprises, specifically, the type of handicraft produced, sales outlets used and status of enterprise, in terms of legal status and ownership. Table 6.9 depicts the results.

Table 6.9: *Profile of Respondents' Enterprises (n=210)*

Profile of Respondents' Enterprises		N	%
Type of handicraft produced	Forest-based	116	55
	Textile-based	66	31
	Metal/mineral based	16	8
	Beadwork	12	6
Main Sales Channels	Local village in Kota Belud	140	67
	Other districts in Sabah region	67	32
	Outside Sabah	3	1
Legal Status	Registered business	167	80
	Non-registered business	43	21
Business Ownership	Sole-proprietorship	192	91
	Partnership	18	9

It be seen that in terms of the type of handicraft produced, over half of respondents produced forest-based handicrafts (handicrafts made of rattan, wild creeper, bamboo or screw pine, e.g. woven baskets, bags, mats, blowpipe). Textile-based activity was the second most popular type (e.g. woven cloth, rib shawl, table runner, and cushion cover). Metal or mineral based (e.g. machetes, gongs, ceramic plates) and beadwork producers represented only eight percent and six percent of respondents respectively. These proportions are similar to statistics from the Malaysian handicraft industry survey in 2008, which reported that the most popular categories were forest-based and textile-based handicrafts. These results might also be influenced by the nature of Sabah itself, which is rich in natural forest resources.

Respondents also indicated which sales channels they used. Some previous studies find that a small firm's choice of distribution channel or sales outlets can impact on overall performance (Chaganti& Chaganti, 1983; Kaikkonen, 2006; Kalantaridis & Bika, 2006). Table 6.9 shows that two thirds of respondents sold most of their products in their local village, with 30 percent selling most of their products to other districts in Sabah. Only a very small proportion (two percent) sold the bulk of products outside Sabah. Chi-squared tests show that there are significant relationships between respondents' sales channels and their status (χ^2=8.573, p<0.05), premises (χ^2=36.823, p<0.001), sales turnover (χ^2=41.702, p<0.001) and profit (χ^2=24.607, p<0.01). A greater proportion of part-time and domestic producers sold their products to the local village rather than to other districts or outside Sabah.

In terms of performance, chi-squared analyses reveal surprise results. A greater proportion of respondents who sold their products beyond their village earned higher sales turnovers, but one third of respondents who sold their products outside Sabah earned profits of less than 40%, while a greater proportion of respondents who sold in the local village earned profit up to 60%. It could be that selling in a very local area involves less operating costs in terms of transportation, giving higher profit.

Respondents also indicated the status of their enterprises, in terms of legality and ownership. Table 6.9 shows that the vast majority of respondents (80 percent) had registered their enterprises as formal legal entities, i.e. they held a trading license permitting them legally to produce and sell their handicrafts. In addition, an even greater proportion of respondents operated their enterprises as sole-proprietors (91

percent) rather than as partnerships. Chi-squared analysis reveals a significant relationship between legal registration and premises (χ^2=16.146, p<0.01), a greater proportion of respondents producing in neighbours' or parents' houses had non-registered enterprises. A Chi-squared test also indicates a significant relationship between legal registration and sales turnover (χ^2=19.332, p<0.01), with a greater proportion of respondents who registered their business earning higher sales (more than RM 15,000) compared with non-registered enterprises. Producing and trading with a valid license may allow more direct market access, so earning higher income, compared with non-registered producers who may heavily depend on middleman due to their unauthorised operations (Berma, 2001). Ownership is significantly related to status (χ^2=6.141, p<0.05), premises (χ^2=15.696, p<0.01) and sales turnover (χ^2=12.696, p<0.05), whereby a significant proportion of partnership enterprises were run full-time and in workshops.

6.3.3 Summary of Key Points

Results in this section reveal that overall, the survey respondents were mainly female, middle-aged to older (30 years and above), and with modest formal education. Over three quarters lived in modest wooden houses and a similar proportion was married with children/dependants. All profile characteristics were in accordance with MHDC census data. The results of Chi-squared analyses between each of the profile variables and key variables of status, premises and performance individually showed some significant results, for example, older respondents tended to report higher profit levels, and respondents with higher education generated higher sales. However, the tests did not give consistent results for the relationship between respondents' profiles and their status, premises and performance. For example, it was not found that younger, high educated males living in brick houses without dependants, were significantly more likely to be high performing, full-time workshop producers. In terms of the profile of respondents' enterprises, this section has revealed that the vast majority of enterprises were legally registered and operated as sole proprietorships. They were mainly involved in production of forest or textile handicrafts which were then sold, predominantly, in the local village of the respondents.

6.4 Respondents' Business Background

Previous studies on rural small businesses contend that a supportive business background like having family and friends in a business (Frank, et al, 2007; Davidson & Honig, 2003), having work experience prior owning business (Bhagavatula, et al, 2010; Kalantaridis & Bika, 2006; Davidson & Honig, 2003; Kaikkonen, 2006), or having formal technical skills and business knowledge through training or courses (Frank, et al, 2007; Totterman, & Sten, 2005) can all influence business performance. Previous training in a handicraft incubator was mentioned often by the in-depth interviewees as an important source of knowledge that they gained for starting up their enterprises. Therefore, the survey respondents were asked questions about their history of involvement in handicraft production. This included whether or not their parents had experience running a business, also when the respondents first learned about handicraft making, the length of time they had been involved in handicraft production, whether they had attended a handicraft incubator, and the nature of their previous employment. The following sections report the results.

6.4.1 Parental Involvement in Running a Business

Bhagavatula, et al (2010) and Kalantaridis and Bika (2006) have suggested that entrepreneurs whose parents have a background in running a small business may gain advantages such as early exposure in technical skills or business knowledge. The in-depth interviews revealed that some interviewees who had parents running a business gained advantages in terms of inherited resources such as tools and machines for handicraft production. For this question, respondents were asked 'do your parents run a business?' and for those who answered 'yes', a follow up question asked them to state the type of business their parents ran. Tables 6.10 and 6.11 show the results.

Table 6.10: *Parental Involvement in Running a Business (n=210)*

Parents running a business	n	%
Yes	63	30
No	147	70
Total	210	100

Table 6.11: *Parent's Business (n=63)*

Type of parent's business	Respondent who parents run a business (n=63)	
	n	%
Selling handicraft	45	71
Selling vegetables and fruits	10	16
Farmers/cultivators	4	6
Selling food/catering	3	5
Make clothes	1	2

It can be seen that only 30 percent of respondents had parents who ran a business. Of these, the vast majority (71 percent) made handicrafts. Chi-squared analysis found a significant relationship between parental involvement in running a business and premises (χ^2=20.984, p<0.001) as well as sales turnover (χ^2=14.336, p<0.05). In terms of premises, although similar proportions of respondents made their handicrafts in their own home and own workshop, a greater proportion of respondents who had no parental involvement in running a business produced their handicrafts in government workshops. In terms of performance, a greater proportion of those who earned a higher sales turnover (RM 25,000 and more) had parents who did not run a business, a surprising result. For this background characteristic, there does not seem to be a performance advantage to respondents from having parents who run a business.

6.4.2 Respondents' History of Involvement in Handicraft Production

In terms of background, the survey also explored respondents' history of involvement in handicraft production. Long experience of production may be linked to performance advantages. Hence, respondents were asked when they first learned to make handicrafts and also the length of time, in years, they had been involved in the activity. Tables 6.12 and 6.13 show the results.

Table 6.12*: When Producers First Learned to Make Handicraft (n=210)*

When first learned	n	%
Childhood	41	19
Teenager	75	36
Adult	94	45
Total	210	100

Table 6.13*: Length of Time in Handicraft Production (n=210)*

No. of years in handicraft production	Total (n=210)	
	n	%
5 to 10 years	88	42
11 to 15 years	30	14
16 to 20 years	34	16
21 to 25 years	12	6
26 to 30 years	14	7
31 to 35 years	11	5
36 to 40 years	3	1
41 years and more	18	9

The results show that many survey respondents were quite "late starters" to making handicrafts, being involved in production for quite a short period of time. It is found that 45 percent only began making handicraft when they were adults and over half had been producing for 15 years or less. As the average age of respondents was quite high, these results reinforce that for most respondents, making handicraft was not an activity learned or inherited continuously from childhood, it was a choice made as a young adult or older. A Chi-squared test of the relationship between parental involvement in a business and when respondents first learned handicrafts found, as expected, a significant relationship between the two. Those respondents with parents who run a business were more likely to have begun handicraft making as teenagers (χ^2=8.794, p<0.05). Chi-squared analysis also found some significant relationship between history of involvement in handicrafts and respondents' status (χ^2=7.955, p<0.05) and premises (χ^2=21.054, p<0.01). Namely, childhood starters were significantly more likely to be involved in full-time workshop-based production, whereas those involved in handicraft production for a long time (more than 21 years), were more likely to earn very low sales turnover, less than RM5,000 (χ^2=86.865, p<0.001), but earn higher profit between 61 to 70% (χ^2=73.615, p<0.001).

6.4.3 Respondents' Attendance at Handicraft Incubator

Several studies propose that entrepreneurs who attend courses or training in a business incubator are likely to operate their enterprise commercially and in a formal way (Holmes & Zimmer, 1994; Totterman, & Sten, 2005). The Malaysian

government, under the Malaysian Handicraft Development Corporation, runs a handicraft incubator scheme. Young producers are nurtured over six months to three years and they are required to operate a business independently once they finish the scheme. In this study, respondents were asked if they had ever attended a handicraft incubator. This was to see how many respondents had taken up this scheme, and also to investigate any relationship between attendance at an incubator and respondents' status, premises and performance.

Table 6.14: *Attendance at Handicraft Incubator (n=210)*

Have attended courses in incubator	n	%
Yes	135	64
No	75	36
Total	210	100

Table 6.14 shows that close to two thirds of respondents had attended a handicraft incubator, suggesting a positive take up of the government scheme. In terms of relationship to status, premises and performance, Chi-squared analysis found incubator attendance was significantly related to premises, namely, incubator graduates were more likely to produce in a government workshop (χ^2=41.880, p<0.001). Ex-incubatees were also more likely to have higher sales turnover, more than RM20,000 (χ^2=14.141, p<0.05), compared with those who had not participated in the scheme.

6.4.4 Respondents' Previous Employment

Previous studies suggest that the nature or extent of an entrepreneur's previous employment may affect the progress of their present enterprise (Kalantaridis & Bika, 2006; Davidsson, & Honig, 2003). In the survey, respondents were asked if they had ever gained an income other than in handicraft production, and if so, in what field. Tables 6.15 and 6.16 show the results.

Table 6.15: *Respondents' Previous Income in Fields other than Handicraft (n=210)*

Previous income other than handicraft	n	%
Yes	135	64
No	75	36
Total	210	100

Table 6.16: *Types of Previous Income of Handicraft Producers (n=135)*

Previous source of income	n	%
Self-employed	45	33
Permanent salaried work	38	28
Part-time salaried work	52	39
Total	135	100

It can be seen that nearly two-thirds of all respondents had received a previous income prior to involvement in handicraft production. This result fits with earlier ones which showed respondents were mainly middle aged, but had come to handicraft production as adults, rather than straight from full-time education. In terms of the type of work these respondents had done, it is interesting that two thirds had been in salaried employment rather than self-employment. This result is consistent with in-depth interviews findings, where interviewees had gained management and communication skills from previous salaried work, but it is surprising that only a third of respondents with previous employment were involved in running a business. In terms of status, premises and performance, Chi-squared analysis found a significant relationship only with status (χ^2=11.874, p<0.01), namely, respondents with previous employment in another field were significantly more likely to produce part-time compared to those without previous employment.

6.4.5 Summary of Key Points

Results in this section have revealed that overall, the respondents started handicraft production at least as young adults, and had been involved in production for quite a modest length of time. They mainly gained their skills from government incubator training rather than learning or inheriting these from parents or a family business. So, respondents who started handicraft making as children, following the

example of parents, were a small minority of this sample. However, no consistent links were found between these background characteristics and respondents' status, premises and performance. Therefore, it is not possible to propose, for example, that "late starters" who graduated from incubators have a different status, premises or performance compared with "early starters" who inherited family businesses.

6.5 Support and Investments in Respondents' Enterprises

6.5.1 Who is Involved in Respondents' Production?

These sections now focus on how respondents operated their enterprises in terms of support and investment. Existing studies propose that aspects of a business founder's environment, such as encouragement from family and friends, membership of a business network and contact with assistance agencies can have positive influences to start or further continue a business (Davidsson & Honig, 2003; Cooper, 1981; Berma, 2001). It was interesting to investigate the extent of help that respondents drew from others, as this gives an indication of respondents' networking capability and skills, and also respondents' ambitions in terms of sales and growth. For this survey, 'helper' was defined as a person involved in production assistance. Respondents were asked first whether they made handicrafts alone. For each respondent who answered "No", they were requested in a follow-up, to indicate which others helped them. They were also asked whether their helpers were hired full-time or part-time, and whether they were paid or unpaid. Tables 6.17 and Table 6.18 show the results.

Table 6.17: *Number of Respondents who Make Handicraft Alone (n=210)*

Make handicraft alone	n	%
Yes	64	30
No	146	70
Total	210	100

Table 6.18*: Respondents' Main Help in Handicraft Production (n=146)*

Main helper	Respondents who make handicraft with helper				Total (n=135)	
	Full-time helper	Part-time helper	Paid helper	Unpaid helper	N	%
Relatives	44 (48%)	27 (50%)	23 (34%)	48 (62%)	71	49
Friends	30 (33%)	16 (30%)	20 (29%)	26 (33%)	46	32
Neighbours	5 (5%)	6 (11%)	7 (10%)	4 (5%)	11	8
Local Labour	13 (14%)	5 (9%)	18 (27%)	0	18	12
Total	92	54	68	78	146	100

The results show that two-thirds of producers did not make handicrafts alone, i.e. they did ask others to help them. Of this group, nearly half used their relatives as the main source of help. Most often, this was full-time and unpaid. One third of the group used friends, also mainly full-time, unpaid. Only 13 percent used local labour, this was most often full-time and always paid. These results reveal interesting insights about the nature of handicraft production for many of the respondents, namely, that many had family and friends that contributed to production, but without formal recognition or payment. In terms of relationship to status, premises and performance, Chi-squared analysis finds that significantly more respondents who worked alone undertook part-time, home-based production compared with those that used help (χ^2=34.286, p<0.001). In terms of sales, Chi-squared analysis found respondents with helpers were more likely to earn sales at the upper end (RM20,000 above) (χ^2=19.559, p<0.01). They were also more likely to have greater profit, more than 50% (χ^2=30.3090, p<0.01).

6.5.2 Sources of External Support

Respondents were asked whether they received external support or assistance in their handicraft production. The kinds of support related to, for example, obtaining production equipment or raw materials, provision or expansion of production space, marketing assistance or acquisition of skills. For each respondent who answered "Yes" to the question, they were asked to indicate the main external support they obtained. Four choices of answers were provided, namely, government agencies,

non-government agencies, family and friends. Table 6.19 and Table 6.20 show the results. Respondents were then asked whether they received support in terms of financial assistance or direct assistance. The respondents were able to provide more than one for the kind of support received. Table 6.21 and 6.22 give the results.

Table 6.19: *Proportion of Respondents who Received External Support for Handicraft Production (n=210)*

Received External Support	n	%
Yes	155	74
No	55	26
Total	210	100

Table 6.20: *Main Source of External Support among Respondents (n=155)*

Main Source of External Support	n	%
Government agencies	112	72
Family	24	16
Non-government agencies	12	8
Friends	7	5
Total	210	100

As can be seen from Table 6.19 and Table 6.20, nearly three-quarters of respondents stated that they had received external support. Half of these claimed government agencies were the main source, followed by family, non-government agencies and friends, respectively. Table 6.21 and Table 6.22 show the kind of support that respondents claimed.

Table 6.21: *Kind of Support Received by Respondents, by Financial Assistance (n=155)*

Source of External Support	Production equipment/ Tools	Raw materials	Production space	Sales and Marketing	Technical Skills
	n	**n**	**n**	**n**	**n**
Government agencies	3	7	3	0	3
Non-government agencies	0	0	0	0	0
Family	0	1	0	0	0
Friends	0	0	0	0	0
Total (out of 147) %	3 (2%)	8 (5%)	3 (2%)	0 (0%)	3 (2%)

Table 6.22: *Kind of Support Received by Respondents, by Direct Assistance (n=155)*

Source of External Support	Production equipment/ tools	Raw materials	Production space	Sales and Marketing	Technical Skills
	n	**n**	**n**	**n**	**n**
Government agencies	27	13	56	72	89
Non-government agencies	0	0	1	4	1
Family	8	4	4	0	22
Friends	1	1	3	4	3
Total (out of 147) %	36 (23%)	18 (12%)	64 (41%)	80 (52%)	115 (74%)

It can be seen from these Tables that only a very small number of respondents claimed to receive financial assistance, this was almost entirely from government agencies for items such as raw materials and tools. In comparison, a much greater proportion of respondents received direct assistance, substantially in terms of technical skills and marketing. The vast majority of this assistance was provided by government agencies.

From the last two sections, it is interesting to note the differences that respondents revealed between the sources of help and support they use. Family and friends were mainly used as a labour resource, and most often this was informal and unpaid. For help in acquiring capital items, government agencies were most often used.

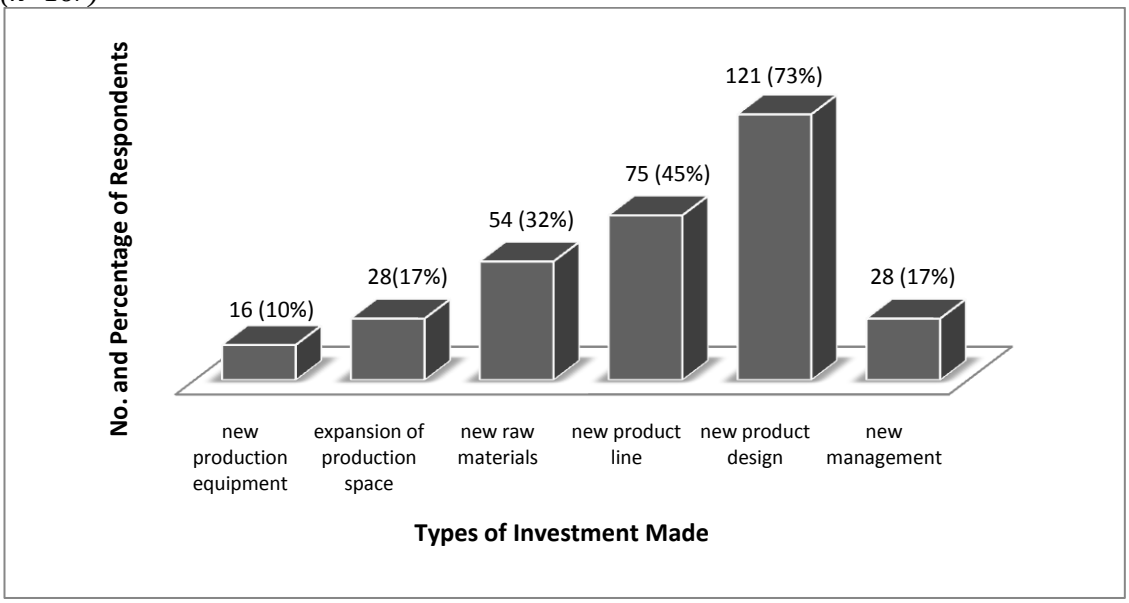
6.5.3 Investment in Business

Respondents were also asked whether they had invested anything in their handicraft enterprise in the last five years. Respondents who answered "Yes" were then asked to indicate the type of investments they had made. They could give more than one answer for the type of investment. Table 6.23 and Figure 6.1 show the results.

Table 6.23*: Percentage of Respondents who have invested for Handicraft Production for the last five years (n=210)*

Investment Made for Production	n	%
Yes	167	80
No	43	20
Total	210	100

Figure 6.1: Types of Investments Respondents Have Made in their Handicraft Enterprises (n=167)



As can be seen, over three quarters of respondents claimed they had made investments in their enterprises. Of these, the most common types were product-related, i.e. developing new product designs, lines and investing in new raw materials. Relatively few respondents spoke of investing to expand or improve efficiency of production, such as new production space or equipment.

6.5.4 Sources of Information on Business

Last in this section, respondents indicated the sources of information they used to help them with their enterprises. In the literature, it is proposed that entrepreneurs gain information or knowledge about starting and continuing a business from several sources, such as government agencies, trading networks (middleman or suppliers), family and friends, seminars and workshops, as well as from other entrepreneurs (Cooper, 1981; Abdul Kader, et al, 2007; Berma, 2001). In the survey, respondents were asked to indicate the main source of information they used in starting and continuing their business, and then to indicate how frequently they met with this source. Figure 6.2 and Table 6.24 show the results.

Figure 6.2: The Main Source of Information Used by Respondents (n=210)

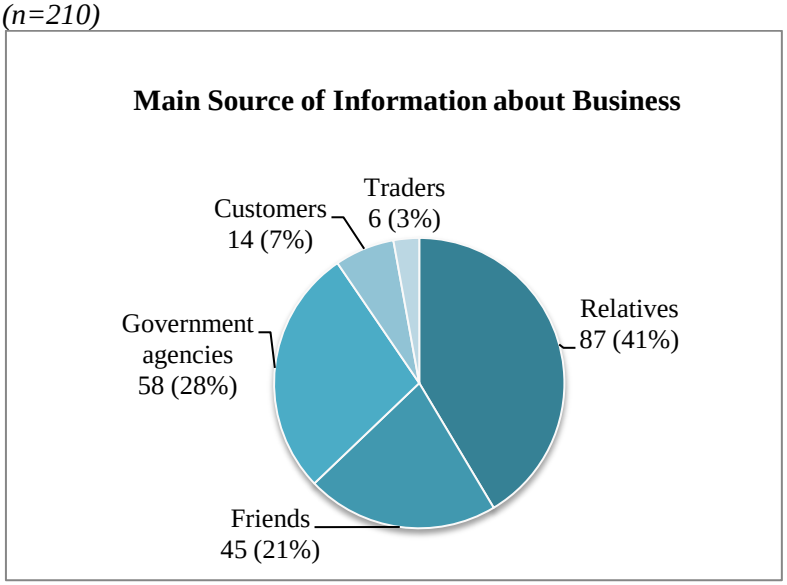


Table 6.24: *Frequency of Respondents' Meetings with their Sources of Information (n=210)*

	Very infrequent (once a year)	Infrequent (once a month)	Frequent (once a week)	Very frequent (every day)	Total
Relatives	0	6 (8%)	40 (51%)	41 (77%)	87
Government Agencies	7 (100%)	49 (68%)	2 (3%)	0	58
Friends	0	3 (4%)	31 (40%)	11 (21%)	45
Customers	0	10 (14%)	3 (4%)	1 (2%)	14
Traders	0	4 (6%)	2 (3%)	0	6
Total	7	72	78	53	210

It can be seen that relatives were the single most popular source of information, followed by government agencies and then friends. Only a very small proportion of respondents used customers or traders as their main source of information. In terms of how frequently respondents used their preferred source of information, relatives and friends were contacted most frequently, whereas respondents using 'professional' sources, including government agencies, had less frequent contact (usually once per month).

It is surprising that relatives were the single most popular source of information for respondents, as less than a third of respondents had parents with experience of running a business. Nevertheless, the literature shows it is quite common for entrepreneurs to rely upon close family or friends for advice regardless of their status. Also, this result fits with the quite high involvement of relatives in respondents' enterprises, albeit mainly informal. The result here raises questions about the quality of information exchanged between respondents and their main source of business advice.

6.5.5 Summary of Key Points

In summary, this section has revealed that many respondents made use of both 'official' sources of support, such as government agencies, and also 'informal' sources, such as friends and family, but they used them in different ways. Government agency support was used for direct assistance in acquiring product-related items such as raw materials, new designs and product lines. Family and friends were used in a largely informal and unpaid way, as a handicraft production labour resource. Family and friends were also the preferred sources of information for many respondents. Most respondents were registered as sole proprietors, so the results also highlight levels of social networking in their handicraft production, making frequent active use of informal social contacts to help them in their enterprises.

6.6 Respondents' Perceptions of their Personalities, Motivations, Skills and Support Contexts

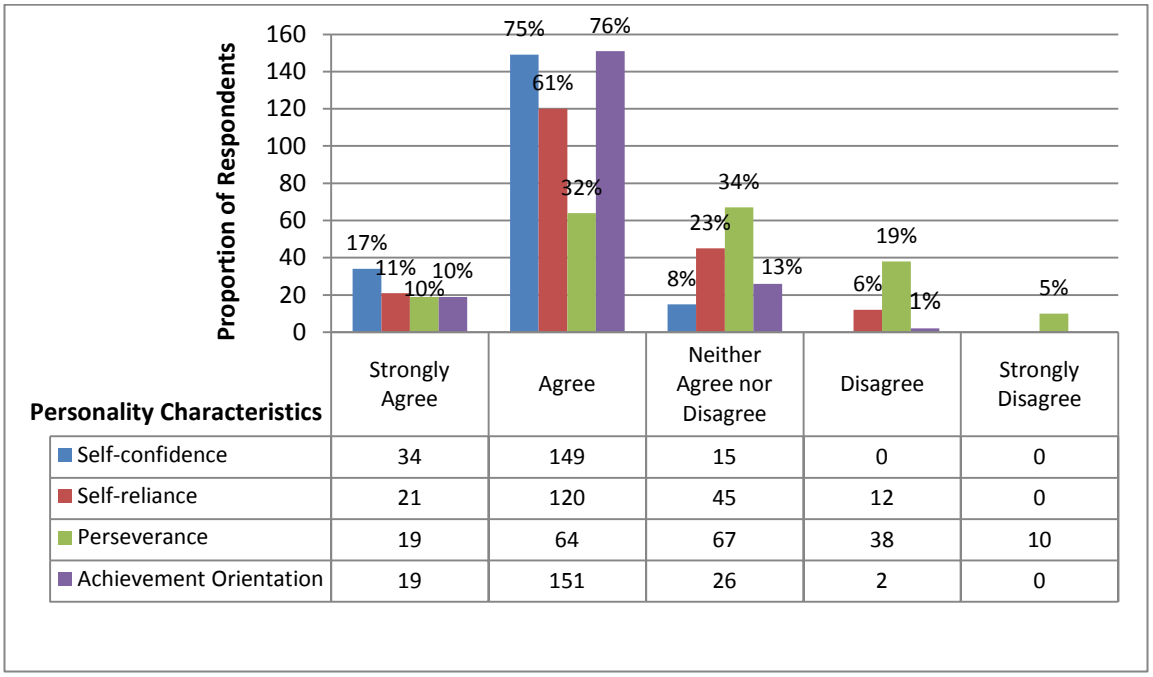
In the literature, a great many studies have investigated the relationships between entrepreneurs' person-related characteristics and the performance of their enterprises. Frank, et al (2007) contends that a person's personality traits like need of achievement, internal locus of control and risk propensity might have an impact on their enterprise performance. The in-depth interviews also revealed some possible links between the personal characteristics of the interviewees and the way he or she had chosen to run their enterprise. In the survey, respondents were asked about their personalities, motivations, skills and support contexts. Tests were then performed to

investigate any significant relationships between these and respondents' status, premises and performance.

6.6 1 Respondents' Perceptions of their Personality Characteristics

First, respondents were asked about their personality characteristics. They rated their agreement/disagreement on a 5-point scale to four statements each representing a different personality characteristic: (1) self-confidence ("I strongly believe in my ability to achieve the things I want"), (2) self-reliance ("I much prefer to do things for myself, rather than rely on fate or other"), (3) perseverance ("I find that unexpected setbacks really stop me from achieving what I want") and (4) achievement orientation ("I plan for new and better ways of doing things to improve performance"). Figure 6.3 shows the result.

Figure 6.3: *Respondents' Perceptions of their Personality Characteristics (n=210)*



Personality Characteristics	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
Self-confidence	34	149	15	0	0
Self-reliance	21	120	45	12	0
Perseverance	19	64	67	38	10
Achievement Orientation	19	151	26	2	0

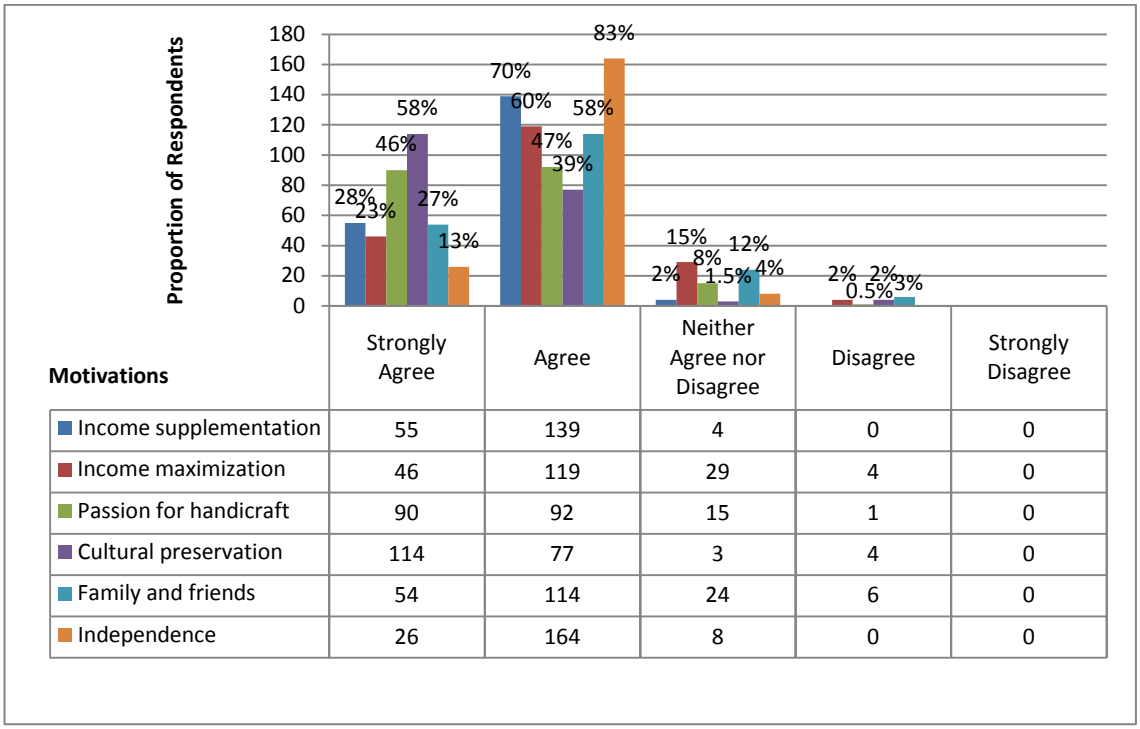
Figure 6.3 shows that overall, respondents gave high levels of agreement to all the statements, in particular, no respondents disagreed with the measure of self-confidence, only one percent disagreed with achievement orientation, and only six percent disagreed with self-confidence. Perseverance was the only measure which respondents showed a notable level of disagreement with. Overall, the respondents

seemed to see themselves as having personality characteristics suited to entrepreneurship. Chi-squared tests were conducted to investigate whether respondents' personality ratings were related to their status, premises and performance. In fact, these tests showed significant relationships for all four personality characteristics. Self-confidence was found to be significantly related to status (χ^2=9.626, p<0.01), premises (χ^2=27.502, p<0.01), sales (χ^2=28.336, p<0.05) and profit (χ^2=24.983, p<0.01), namely, respondents who agreed most strongly with the self-confidence measure were more likely to be full-time, workshop-based and have higher sales and profits. Self-reliance was found to be significantly related to sales (χ^2=48.423, p<0.01), namely, respondents who agreed most strongly with this measure were more likely to have higher sales. Perseverance was found to be related to status (χ^2=20.643, p<0.001), premises (χ^2=33.526, p<0.01), sales (χ^2=4.514, p<0.05) and profit (χ^2=59.909, p<0.001), namely, respondents who disagreed most strongly with perseverance (that setbacks would stop them from achieving what they want) were more likely to be full-time, workshop-based and earn higher sales and profits. Finally, achievement orientation was found to be significantly related to status (χ^2=10.537, p<0.05) and sales (χ^2=49.290, p<0.001), namely, respondents who agreed the most with achievement were more likely to be full-time producers with higher sales.

6.6.2 Respondents' Perceptions of their Motivations

Respondents were then asked about their motivations, by rating their agreement/disagreement on a 5-point scale to six statements, each one representing a different motivation to be involved in handicraft production: (1) income supplementation ("It is a convenient way to make extra money alongside my other job/responsibilities"), (2) income maximization ("It is a very good way to make the highest income I can, compared with other alternatives"), (3) passion for handicraft ("I really enjoy making handicraft, it is my passion"), (4) cultural preservation ("I want to contribute to my cultural heritage"), (5) family and friends ("I am following the advice, or example of my family and friends") and (6) independence ("It allows me to be independent"). Figure 6.4 shows the result.

Figure 6.4: *Respondents' Perceptions of their Motivations (n=210)*



Motivations	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
Income supplementation	55	139	4	0	0
Income maximization	46	119	29	4	0
Passion for handicraft	90	92	15	1	0
Cultural preservation	114	77	3	4	0
Family and friends	54	114	24	6	0
Independence	26	164	8	0	0

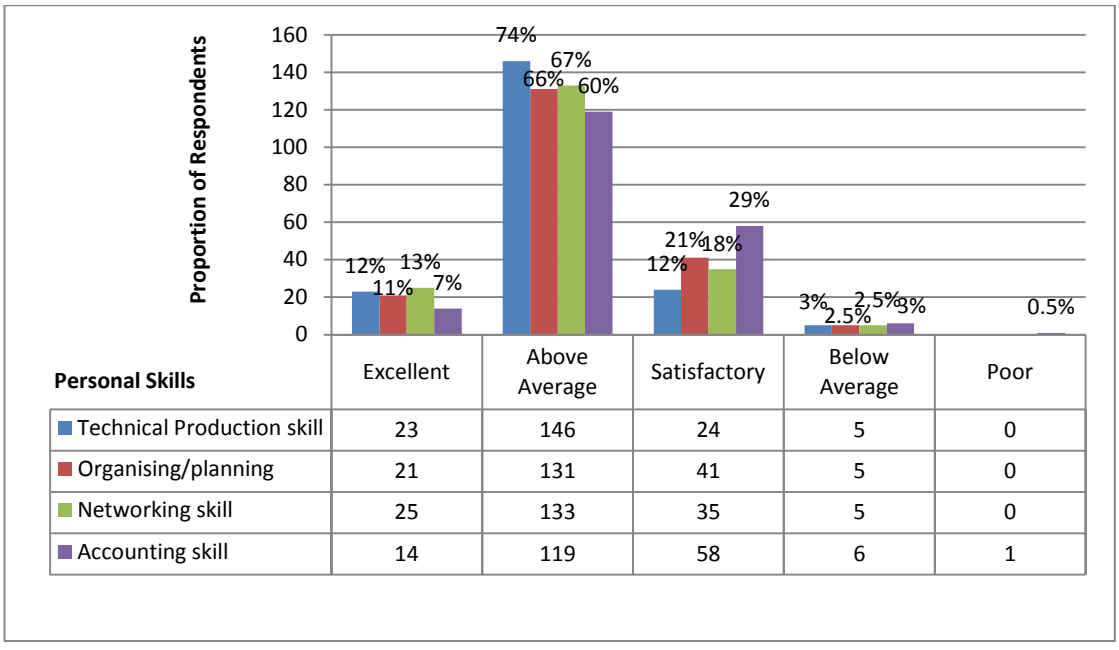
Like the personality ratings, the respondents showed very low levels of disagreement with the motivation statements, with only a small proportion giving a neutral response or lower on any motivation. The vast majority of respondents either agreed or strongly agreed with all the statements. As some motivations (e.g. income maximization and cultural preservation) are somewhat contradictory, this result is surprising. The strong motivation that respondents showed towards cultural preservation was also interesting, as most respondents had started making handicrafts later in life rather than inheriting techniques from older family members. Chi-squared tests were conducted to investigate whether differences in respondents' motivation ratings were related to their status, premises and performance. 'Income supplementation' motivation was found to have no significant relationship with status, premises or performance. However, 'income maximization' was significantly related to status (χ^2=9.023, p<0.05), profit (χ^2=39.349, p<0.001) and sales (χ^2=47.221, p<0.01), namely, respondents who agreed most strongly with this measure were more likely to be full-time and have higher sales and profits. 'Passion', 'cultural preservation' and 'family/friends' were significantly related only to status, namely, respondents who agreed most strongly with these three measures were more

likely to be full-time producers. Finally, for 'need for independence', the Chi-Squared test showed a significant relationship with sales (χ^2=36.741, p<0.01) and profit (χ^2=29.291, p<0.01), namely, respondents who agreed most strongly with the measure were more likely to have higher sales and profits.

6.6.3 Respondents' Perceptions of their Skills

Respondents then rated themselves on four personal skills relevant to handicraft production, namely, (1) technical production skills ("handicraft making skills and equipment handling"), (2) organising/planning ("organising and planning for production and selling"), (3) networking ("ability to connect with other people for generating new ideas, solving problems and developing new business") and (4) accounting ("accounting and bookkeeping skills"). Respondents were asked to rate their own abilities for these skills on a scale from 1 ("poor") to 5 ("excellent"). Figure 6.5 shows the result.

Figure 6.5: *Respondents' Perceptions of their Skills (n=210)*



Personal Skills	Excellent	Above Average	Satisfactory	Below Average	Poor
Technical Production skill	23	146	24	5	0
Organising/planning	21	131	41	5	0
Networking skill	25	133	35	5	0
Accounting skill	14	119	58	6	1

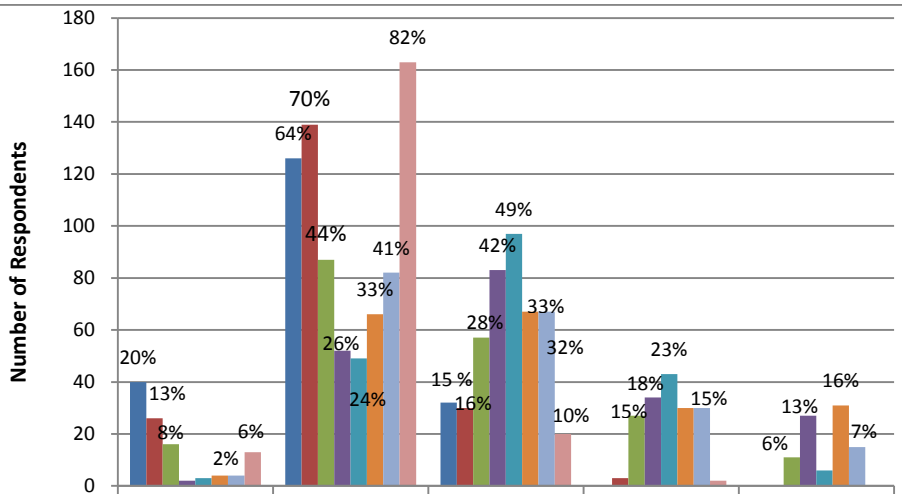
As can be seen, for all the skills, between two thirds and three quarters of all respondents rated their abilities above average or better. The strongest self-ratings were in technical production skills and networking. Accounting skills were rated the lowest, although still only a tiny proportion rated themselves as below average or

worse. Chi-squared tests were performed to identify whether respondents' skills ratings were linked significantly to their status, premises or performance. These tests revealed significant relationships between all the skills ratings and performance (sales and profits). Namely, respondents with higher sales and profits were significantly likely to give stronger ratings on technical production skill, organising/planning skills, networking skills and accounting skills. In addition, significant relationships were found between respondents' organising/planning and networking skills and their status and premises. Namely, respondents who rated themselves more strongly in those skills were more likely to work full-time and have workshop premises. Overall therefore, the tests showed quite clear, consistent relationships between self-rated skills and status, premises and performance.

6.6.4 Respondents' Perceptions of their Support Context

Finally in this section, respondents were asked their views about the support context they experienced. Previous studies have long recognised that the performance or success of a small firm is strongly influenced by the context it is situated in (Gartner, 1985; Specht, 1993; Abdul Kader, et al, 2009&Naffziger, et al, 1994). An entrepreneur's choices may be influenced, for example, by ease of access to resources, and level of both formal and informal support and advice (Davidson & Honig, 2003; Begley, Tan & Schoch, 2005& Abdul Kader, 2009). In the in-depth interviews, some interviewees explained that government assistance provided them with better opportunities to produce handicrafts commercially, for others family and friends were important, as helpers as well as sources of financial assistance. Some interviewees also spoke about the difficulties of getting young workers in handicraft production, which were needed to ensure continuous production. Hence in the survey, respondents were asked whether they felt they had access to the following, in the context of their handicraft enterprise: emotional and technical support of family and friends, government agency support, access to finance, reliable workers and raw materials, access to sales opportunities, and time flexibility. Figure 6.6 shows the result.

Figure 6.6: *Respondents' Perceptions of their Support Context (n=210)*



Support Context	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
Emotional support from family/friends	40	126	32	0	0
Technical support from family/friends	26	139	30	3	0
Government agencies	16	87	57	27	11
Access to finance	2	52	83	34	27
Reliable workers	3	49	97	43	6
Raw materials	4	66	67	30	31
Sales opportunities	4	82	67	30	15
Flexibility of time	13	163	20	2	0

It can be seen that this question gave a greater range of responses than questions relating to personality, motivations and skills. The majority of respondents agreed that they benefited from most of these factors in their contexts, but quite large proportions disagreed about other factors. In terms of the factors where respondents felt the most support, emotional support from family and friends, technical support from family and friends and flexibility of time were agreed with by the largest proportion of respondents. The respondents were less positive about the extent of government agency support, access to finance, reliable workers and raw materials. For these, approximately 15 to 23 percent of respondents either disagreed or strongly disagreed that they benefited from these things. Chi-Squared tests were performed to identify whether respondents' views about their support context were significantly to their status, premises or performance. Access to finance and raw materials ('resource related' areas) showed the strongest relationships, as they were both linked to status, premises and performance. Access to finance was significantly related to status (χ^2=19.977, p<0.01), premises (χ^2=51.534, p<0.001), sales (χ^2=54.213, p<0.01) and

profits (χ^2=36.618, p<0.05). Similarly, access to raw materials was found to be significantly related to status (χ^2=12.173, p<0.05), premises (χ^2=40.985, p<0.01), sales (χ^2=57.888, p<0.01) and profits (χ^2=34.592, p<0.05), namely, respondents who strongly agreed they had access to these resources were more likely to be full-time, workshop-based and have higher sales and profits than those who disagreed. In terms of other results, it was interesting that "access to reliable workers" was significantly related to respondents' premises (χ^2=46.438, p<0.001) and sales (χ^2=44.207, p<0.05), namely, those with access to reliable workers were more likely to have workshops, and have higher sales. Access to government agencies was significantly related only to status (χ^2=11.500, p<0.05) and premises (χ^2=74.255, p<0.001) but not to performance. Access to emotional support from family and friends was significantly related to profits (χ^2=32.671, p<0.05). In terms of sales opportunities and flexibility of time, full-time respondents with higher sales were more likely to agree that they had access to these than part-time respondents. For access to flexibility of time in production, this result was a bit surprising as the in-depth interviews found part-time domestic producers liked their status because of the flexibility it gave them to juggle household work.

6.6.5 Summary of Key Points

The preceding sections showed results relating to respondents' perceptions of their personality characteristics, motivations, skills and support contexts. Overall respondents rated their personality characteristics and skills very highly, and in terms of relationships to performance, Chi-squared analyses revealed many significant links between respondents' self-rated personality and skills and their performance. All skills ratings showed a significant relationship with sales and profit levels, as did three of five personality characteristics (self-confidence, self-reliance and achievement orientation). In all cases, relationships were in a logical direction, namely, respondents who rated themselves more highly in terms of skills and personality characteristics, were likely to have higher sales and profit levels. In terms of support context, the results revealed that overall, the respondents felt positively about the emotional and technical support they received from family and friends, and about their time flexibility. They were relatively more negative about resource and

opportunity related factors such as accessing finance, raw materials and reliable workers, and accessing sales opportunities, but interestingly, it was these factors which showed a significant relationship to performance. Respondents who felt they were able to access to these things were likely to have higher sales and profit levels. The results relating to motivations were less consistent. Only a tiny proportion of respondents disagreed with any of the motivations asked, even though some of them were thought to be contradictions of others. Having reported the descriptive results, and bivariate tests, the next section discusses the implications for the objectives of the survey. It then describes the methods and results of multivariate analysis conducted to address these objectives.

6.7 Summary of Descriptive and Bivariate Results, and Implications for Multivariate Analysis

Survey results so far give some insights into respondents' status, premises and performance, as well as their profiles, business operations, and their perceptions of their personalities, skills, motivations and support contexts. In addition, bivariate analyses of respondents' status, premises and performance with all other characteristics and variables, reveal some individually significant relationships.

In terms of the key variables of status, premises and performance, the results have shown that respondents had predominantly (61 percent) part-time status, but were quite evenly split between domestic and workshop premises. Half the sample reported the lowest turnover categories of less than RM5,000, although overall, respondents reported substantial profits from their returns. In terms of profile, respondents were predominantly female, middle-aged and with modest formal education. Three-quarters of the sample lived in modest wooden houses and were married with dependents. Respondents' enterprises were mainly legally registered as sole proprietorships, and involved in making forest or textile-based products which were sold in local villages. Respondents were mainly quite 'late starters' to handicraft production, namely, they had learned their skills from formal incubator training as adults, rather than inheriting them from family, this was quite a surprising result. In running their enterprises, respondents relied on both official and informal sources of support, but used them in different ways: official (government) assistance

was asked for in terms of direct assistance for production-related items, whereas family and friends were used for) labour and advice, predominantly unpaid. Informal input of family and friends, overall, seemed quite substantial to respondents' enterprises. Finally, in terms of personality traits, motivations and skills suited to entrepreneurship, respondents seemed to rate themselves highly on these. In terms of support contexts, respondents felt positively about the help they received from family and friends, but were less positive about access to key resources and also sales opportunities.

The results of bivariate analyses between respondents' profile characteristics and the key variables of status, premises and performance revealed several significant relationships, but these were not found for all three of the key variables, in a consistent pattern. For example, chi-squared tests found a significant relationship between gender and premises, but not for status and performance, and though a significant relationship was found between respondents' status and their previous employment in other fields before starting handicraft production, this was not related to premises or performance. These results suggest the relationship between handicraft producers' performance, status and premises is complex, and it is not possible to conclude from the bivariate analyses that full-time, workshop-based producers have better sales and profits than part-time, home-based producers. With these mixed results, it was decided to investigate the relationship between status, premises and performance in a multivariate way. Cluster analysis was identified as an appropriate method, as it has the purpose of identifying distinct groups of respondents from a dataset, based on key variables of interest. Therefore, it was decided to perform a cluster analysis of respondents using the variables of status, premises and performance. This analysis directly addressed the first objective of the survey, to test the relationship between status, premises and performance, investigating in a direct way whether full-time, workshop producers are higher performing than part-time, domestic producers.

The survey also had a further objective: to investigate the relationship between handicraft producers' status, premises and performance, and other person-related and contextual factors. This was to identify whether any of these factors could have a significantly different relationship to handicraft producers' status, premises and

performance. The technique chosen to perform these analyses was One-Way ANOVA. This technique tests whether each person-related and contextual factor differs significantly across the clusters. A statistically significant difference would indicate that, for the factors being tested; the clusters are distinctly different (drawn from different populations rather than the same population). An intervening step between cluster analysis and ANOVA was multiple discriminant analysis. Discriminant analysis served as a validating tool to evaluate the accuracy of group membership derived from cluster analysis before univariate analysis. Table 6.25 illustrates the analytical steps diagrammatically.

Table 6.25: *Analytical Steps for investigating the Relationships between Status, Premises and Performance, and Characteristics and Context Variables, in Multivariate Way.*

	Analytical Activity	**Purpose of conducting the analysis**
1	Cluster Analysis	With mixed results from the bivariate tests of the relationships between status, premises and performance, cluster analysis can explore the relationships in multivariate way. The analysis can identify groups or clusters of respondents according to the key variables of status, premises and performance, analysed together.
2	Multiple Discriminant analysis to verify the clustering	Cluster analysis produced three clusters of respondent based on key variables of status, premises and performance. The accuracy of the three-cluster classification of producers can be tested using multiple discriminant analysis. Discriminant analysis can determine whether a cluster solution is optimal, based on the number of respondents that are correctly assigned to each groups.
3	One-Way ANOVA tests of profile characteristics of the clusters	After generating and validating clusters of respondents based on their status, premises and performance, One-Way ANOVA tests were conducted between clusters and each person-related and contextual factor, to identify possible significant differences between clusters.

6.8 Cluster Analysis of Respondents: Status, Premises and Performance

6.8.1 Introduction

The results of bivariate tests of the relationships between survey respondents' status, premises and performance were mixed, therefore, cluster analysis was performed explore the relationships between the variables in a multivariate way. The main objective of the cluster analysis was to examine if the survey respondents could be grouped into discrete clusters, on the basis of their status, premises and performance. This could test directly whether full-time, workshop-based handicraft producers had higher performance than part-time domestic producers.

6.8.2 Cluster Analysis Methods

Four variables were used to derived the clusters: (1) status (dichotomous variable, either 'full-time' or 'part-time'), (2) premises (categorical variable, comprising five categories, 'own home', 'own workshop', 'government workshop', 'parent's house' and 'neighbour's house'), (3) sales turnover (estimated by respondents in 2010, in Ringgit Malaysia) and (4) profits (estimated profit percentage by respondents in year 2010). These variables were inputted into SPSS and a two-step cluster analysis was performed using the Quick Cluster function.

6.8.3 Cluster Analysis Results

The two-step cluster analysis identified three clusters of respondents based on the four inputted variables. Table 6.26 shows the results.

Table 6.26: *Cluster Profiles Summary (n=210)*

Variables	**Cluster 1 (n=80)**	**Cluster 2 (n=55)**	**Cluster 3 (n=75)**
Performance			
2010 Sales Turnover (Mean)	RM 11, 053	RM 7,685	RM 4,285
2010 Profit (Mean)	64%	58%	60%
Status			
1. Part-time	0	53	75
2. Full-time	80	2	0
Premises			
1. Own home	36 (45%)	1 (1%)	75
2. Own workshop	27 (34%)	11 (20%)	0
3. Government workshop	17 (21%)	28 (51%)	0
4. Parent's house	0	8 (15%)	0
5. Neighbour's house	0	7 (13%)	0

It can be seen that the three clusters showed some distinct characteristics. The first cluster (Cluster 1) consists entirely of full-time producers, in fact, almost all the full-time respondents in the survey belong to this cluster. In terms of premises, Cluster 1 members are quite evenly split between domestic premises and own workshop, followed by 21% in a government workshop. In terms of performance, Cluster 1 members show the highest sales turnovers and the highest profits of the three clusters. This cluster is also the biggest of the three, with 80 members. The second cluster, Cluster 2, consists almost entirely of part-time respondents. All but one respondent have premises outside the home, half in government workshops, a quarter in their own workshops, and the rest in parents' or neighbours' houses. In this cluster, respondents have lower sales turnover than Cluster 1 but higher sales turnover than Cluster 3. However, they have the lowest profit levels of all the clusters.

Finally, Cluster 3 consists entirely of part-time, domestic producers. These respondents show the lowest sales turnovers of the three clusters. However, Cluster 3 members have a mean profit level that is lower than Cluster 1 but higher than Cluster 2. To help summarise the profile of the clusters, Figure 6.7 presents their key characteristics, and gives descriptive labels to apply to them. The next section offers discussion and interpretation of the clusters.

Figure 6.7: *Cluster Characteristics (n=210)*

Cluster 1 "High-performance full-timers"	**Cluster 2 "Part-time professionals"**	**Cluster 3 "Part-time home workers"**
All full-time producers	All part-time producers	All part-time producers
45% at own home, 55% workshop (greater proportion in own workshop)	Almost all outside home (half in government workshop)	All home-based (own home)
Highest sales turnover	Medium sales turnover	Lowest sales turnover
Highest profit	Lowest profit	Medium profit

As Figure 6.7 shows, Cluster 1 respondents are labelled ‘high-performance full-timers’, although close to half are home-based, they are all engaged in full-time production and show the highest sales and profits of all clusters. At the other end of the scale, Cluster 3 respondents are labelled ‘part-time home workers’, as they are entirely part-time and domestic. Cluster 3 profile is perhaps most like the stereotype of the rural Malaysian handicraft producer, who makes part-time at home, and achieves low sales. Cluster 2 is labelled ‘part-time professionals’, these respondents are almost all part-time but, apart from one member, are entirely involved in production outside the home, whether in a workshop or others’ home. As the choice to produce outside the home in separate premises suggests commitment and ambition, so these respondents have been labelled as ‘professionals’.

Overall, the profiles of the clusters are quite logical except for their profit levels. It is quite surprising to find that Cluster 3 respondents show higher profit levels than Cluster 2, especially as they show lower sales turnover. In fact with their dedicated premises outside the home, Cluster 2 respondents could be expected to have formal accounting procedures that would make them better at managing their profit levels. Two possible reasons were explored to explain this surprising result. First, it was hypothesised that Cluster 2 respondents might have higher operating costs, namely, because almost all of them produced in dedicated premises, they could have higher employment or utilities costs. A second hypothesis was that Cluster 3 respondents could rely more on very local sales outlets compared to Cluster 2. Although local outlets may give limited sales volume, they may lower transportation costs, with positive impacts on profit levels. Bivariate analyses were conducted between the help/employment characteristics of the two clusters and the sales outlets used, to test these propositions. Table 6.27 shows the results.

Table 6.27: *Results of Bivariate Analyses to Explain Reasons for Profit Levels of Cluster 2 and 3 (n=210)*

Variables Tested	**Cluster 2 (part-time professionals)**		**Cluster 3 (part-time home workers)**		**Chi-Squared Test**
	n=55	%	n=75	%	
Sales outlets					χ^2=12.754, *p<0.05*
Local village in Kota Belud	36	26	60	43	
Other districts in Sabah	18	27	15	22	
Outside Sabah	1	33	0	0	
No. of employees					χ^2=48.457, *p<0.001*
No workers	42	30	67	48	
1 to 2 workers	12	19	8	13	
3 to 4 workers	1	20	0	0	
Main source of help					χ^2=27.012, *p<0.001*
Relatives	11	16	25	35	
Friends	24	52	6	13	
Neighbours	6	55	3	27	
Local labours	3	17	3	17	
Full-time helpers					χ^2=17.731, *p<0.001*
Yes	29	32	13	14	
No	15	28	24	44	

The results show support for both the hypotheses. First, it can be seen that a greater proportion of producers in Cluster 3 sold their handicrafts to customers in their local village (43 percent) compared to Cluster 2, while a greater proportion of producers in Cluster 2 sold their handicrafts outside Sabah (χ^2=12.754, p<0.05). To reach more distant markets, Cluster 2 producers may have incurred greater transportation costs, so reducing profit levels.

In terms of employment costs, Table 6.27 also shows that more producers in Cluster 3 had no or fewer employees than Cluster 2 producers (χ^2=48.457, p<0.001), and a higher proportion of Cluster 3 members used temporary helpers in their production (χ^2=17.731, p<0.001), mostly family members. Cluster 2 members, although using mostly friends and neighbours, used them more as permanent helpers (χ^2=27.012, p<0.001). Cluster 2's use of non-family, full-time helpers may involve higher operating costs, with negative impact on profit levels.

6.8.4 Discriminant Analysis: Evaluation of the Accuracy of the Cluster Membership

The accuracy of the three cluster membership produced by Cluster Analysis was tested using discriminant analysis, based on the original four key variables of status, premises, sales turnover and profit percentage that were inputted for the Quick Cluster Analysis. Table 6.28 and 6.29 show the group statistics and eigenvalues and Table 6.30 presents the classification results from discriminant analysis. The group statistics table (Table 6.28) shows that the mean differences between the variables for each clusters are large, which indicates that they are good discriminators.

Table 6.28: *Group Statistics Table*

Group Statistics

TwoStep Cluster Number		Mean	Std. Deviation	Valid N (listwise) Unweighted	Weighted
1	where produce	1.76	.783	80	80.000
	current- nature of production	1.00	.000	80	80.000
	sales turnover in year 2010	11052.75	9838.337	80	80.000
	profit in year 2010	63.75	9.857	80	80.000
2	where produce	3.16	.958	55	55.000
	current- nature of production	1.96	.189	55	55.000
	sales turnover in year 2010	7685.45	11268.564	55	55.000
	profit in year 2010	58.36	9.956	55	55.000
3	where produce	1.00	.000	75	75.000
	current- nature of production	2.00	.000	75	75.000
	sales turnover in year 2010	4285.07	3338.436	75	75.000
	profit in year 2010	60.60	8.300	75	75.000
Total	where produce	1.86	1.089	210	210.000
	current- nature of production	1.61	.489	210	210.000
	sales turnover in year 2010	7753.81	9045.774	210	210.000
	profit in year 2010	61.21	9.564	210	210.000

Table 6.29: *Eigenvalues Table*

Eigenvalues

Function	Eigenvalue	% of Variance	Cumulative %	Canonical Correlation
1	25.810[a]	94.4	94.4	.981
2	1.535[a]	5.6	100.0	.778

a. First 2 canonical discriminant functions were used in the analysis.

Eigenvalues table (Table 6.29) provides an index of overall model fit which is interpreted as being the proportion of variance explained (R^2). Since this study used 3 groups, namely 'Cluster 1', 'Cluster 2' and 'Cluster 3', therefore two functions are displayed in the SPSS output. For the first function, a canonical correlation of 0.981 suggests the model explains 96.2% of the variation in the grouping variables, i.e. whether a respondent populate in Cluster 1 or Cluster 2. For the second function, the canonical correlation of 0.778 suggests the model explains 60.53% of the variation in the grouping variables, whether a respondent is a member of Cluster 2 or Cluster 3.

Table 6.30: *Classification Results from a Discriminant Analysis Evaluating the Accuracy of the clusters produced by Cluster Analysis (n=210)*

Actual Cluster	No. of Respondents in each Actual Cluster	Predicted Group Membership			Percent of Respondents Correctly Classified in each Cluster
		1	2	3	
Cluster 1	80	80 (100%)	0 (0.0%)	0 (0.0%)	80 (100%)
Cluster 2	55	2 (4%)	42 (76%)	11 (20%)	42 (76%)
Cluster 3	75	0 (0.0%)	0 (0.0%)	75 (100%)	75 (100%)

The result of discriminant analysis in Table 6.30 shows that the three cluster solution of types of producer is optimal, with acceptable level of accuracy of the predicted group membership. Respondents were 100% correctly assigned to Cluster 1 (80/80) and Cluster 3 (75/75), while 76% of respondents were correctly classified to Cluster 2 (42/55). This result supports the validity of the cluster analysis.

6.9 Univariate Analysis: Reporting the Profile Characteristics of the Clusters

6.9.1 Introduction

The third objective of the survey was to identify whether handicraft producers' person-related and contextual factors were related significantly to their status, premises and performance. One-Way ANOVA tests were conducted on a total of 30 profile and context variables, examining their relationships to the clusters. A statistically significant difference would indicate, for the factor tested, that the clusters were distinctly different (i.e. drawn from different populations rather than

the same population). In fact, the tests found that the clusters showed significant differences on 13 out of 30 profile characteristics. Table 6.31 shows the results of the analysis.

Table 6.31: *Results of One-Way ANOVA Tests of Profile Characteristics of the Clusters (n=210)*

Independent Variables	Cluster	N	Mean	Std. Deviation	F Statistic	Significance Level
Personal Background						
Age	1	82	3.98	1.186	2.566	0.079
	2	42	3.64	1.340		
	3	86	4.21	1.464		
Gender	1	82	1.73	0.446	1.211	0.300
	2	42	1.74	0.445		
	3	86	1.83	0.382		
Residence	1	82	0.74	0.439	0.428	0.652
	2	42	0.81	0.397		
	3	86	0.79	0.409		
Family Status	1	82	2.29	0.638	0.692	0.502
	2	42	2.33	0.526		
	3	86	2.21	0.635		
Education**	1	82	2.65	0.807	5.381	0.005
	2	42	2.71	0.636		
	3	86	2.31	0.815		
Training in Incubator***	1	82	1.62	0.488	13.476	0.000
	2	42	1.88	0.328		
	3	86	1.43	0.498		
Had previous income other than handicraft**	1	82	1.50	0.503	6.649	0.002
	2	42	1.79	0.415		
	3	86	1.71	0.457		
Parents running a business	1	82	1.28	0.452	0.941	0.392
	2	42	1.24	0.431		
	3	86	1.35	0.479		
Personality Characteristics						
Self-confidence**	1	82	4.21	0.464	5.128	0.007
	2	42	3.93	0.558		
	3	86	4.05	0.458		
Self-reliance	1	82	3.73	0.738	0.055	0.946
	2	42	3.76	0.692		
	3	86	3.77	0.730		
Perseverance***	1	82	2.90	0.869	8.421	0.000
	2	42	3.12	0.993		
	3	86	3.52	1.093		
Achievement Orientation	1	82	3.91	0.613	0.009	0.991
	2	42	3.90	0.484		
	3	86	3.92	0.514		
Personal Skills						
Production/technical skill*	1	82	4.06	0.574	3.627	0.028
	2	42	3.83	0.621		
	3	86	3.84	0.591		
Organising skill*	1	82	3.98	0.544	3.662	0.027
	2	42	3.79	0.606		

Independent Variables	Cluster	N	Mean	Std. Deviation	F Statistic	Significance Level
	3	86	3.72	0.697		
Networking skill**	1	82	4.07	0.562	6.678	0.002
	2	42	3.76	0.617		
	3	86	3.76	0.650		
Accounting Skill	1	82	3.70	0.765	0.091	0.913
	2	42	3.64	0.618		
	3	86	3.66	0.644		
Motivation						
Income supplementation	1	82	4.20	0.483	1.563	0.212
	2	42	4.36	0.533		
	3	86	4.24	0.459		
Income maximization*	1	82	4.17	0.717	3.917	0.021
	2	42	4.00	0.625		
	3	86	3.87	0.700		
Passion for handicraft	1	82	4.23	0.594	1.698	0.186
	2	42	4.36	0.791		
	3	86	4.42	0.659		
Cultural preservation	1	82	4.39	0.515	2.054	0.131
	2	42	4.62	0.582		
	3	86	4.53	0.762		
Family/friends as example**	1	82	4.01	0.577	5.833	0.003
	2	42	4.40	0.665		
	3	86	3.99	0.790		
Need for independence	1	82	4.16	0.457	1.401	0.249
	2	42	4.07	0.407		
	3	86	4.06	0.355		
Support Context						
Emotional support from family/friends	1	82	4.00	0.770	0.126	0.882
	2	42	3.98	0.604		
	3	86	4.03	0.563		
Technical support from family/friends	1	82	3.89	0.770	0.128	0.880
	2	42	3.95	0.492		
	3	86	3.91	0.587		
Government support***	1	82	3.57	0.847	11.912	0.000
	2	42	3.64	1.144		
	3	86	2.94	0.962		
Access to Finance**	1	82	3.06	0.807	4.723	0.010
	2	42	2.88	1.087		
	3	86	2.60	1.044		
Reliable Workers*	1	82	2.91	0.878	3.864	0.023
	2	42	3.29	0.774		
	3	86	2.90	0.720		
Access to raw materials	1	82	2.98	1.111	1.263	0.285
	2	42	3.14	0.843		
	3	86	2.83	1.150		
Sales opportunities	1	82	3.32	0.992	1.917	0.150
	2	42	3.24	0.906		
	3	86	3.03	0.939		
Lifestyle flexibility	1	82	3.96	0.508	0.843	0.432
	2	42	4.00	0.383		
	3	86	3.90	0.461		

*Convention is *p<0.05, **p<0.01, ***p<0.001*

6.9.2 Demographic Profile of Clusters

In terms of respondents' profile, One-Way ANOVA tests revealed significant differences between the clusters in terms of their education level, whether they had attended courses in an incubator, and whether they had previous income prior to their current handicraft production. In most of these, the key differences were between Cluster 3 and the other two clusters. Namely, Cluster 3 members were more likely to have a lower education level and not be ex-incubator, compared to Cluster 1 and Cluster 2. The education result fits with previous studies which propose a relationship between education level and entrepreneurial development (Davidsson & Honig, 2003, Kader, et al, 2009). The result on incubator attendance also fits with studies which find that non-growth enterprises have limited attendance at training programs compared to the growth enterprises (Holmes & Zimmer, 1994; Totterman & Sten, 2005). A more surprising result was that, in terms of previous income, Cluster 1 members were significantly less likely to have had a previous income compared to Cluster 2 and Cluster 3. It would be logical that full-time, high performing producers (C1) would have had a previous income, or business experience, other than handicraft prior to their current operation. The result suggests that producers who practice single-minded commitment and dedication to handicraft production (full-time) can have a stronger performance compared with producers who try different kinds of income generation before handicraft production.

In terms of person-related factors that were not significantly different across clusters, the result relating to respondents' family status (whether they were married with children/dependents) is surprising. Studies on home-based enterprises (Gough, 2010), find that women often see their businesses as secondary to their family roles (Goffee & Scase, 1985, in Shabbir & Gregorio, 1996). So, it would be logical that respondents who were married with children would juggle their handicraft production activities with household and childcare responsibilities, and, therefore, would be more represented in Cluster 3 compared to Cluster 2 and, especially, Cluster 1. The first possible reason explored to explain this result was differences in gender across the clusters. Male handicraft producers usually are not responsible for childcare and household duties, so it is possible for them to work full-time, and/or outside the home, even if they have children/dependents. If male respondents were

found in greater proportions in Cluster 2 and 3, that could explain the result. However, the bivariate analysis showed no significant differences between the clusters in their gender, with more female producers belonging to all clusters.

To explore further family status across the clusters, all male respondents were removed from the sample and a chi-squared test was performed for family status, only on female respondents (n=162). The family status variable was re-coded into 1=without children/dependents and 2=with children/dependents, to test whether female producers with children/dependents would be more represented in Cluster 3 (part-time home workers) and less represented in Cluster 2 (part-time professionals) or Cluster 1 (high performance full-timers). The result revealed no significant difference between the clusters on female producers' family status, and the interpretation was quite surprising. Forty percent of female producers who had children/dependents were represented in Cluster 1 (high performance full-timers) and in Cluster 3 (part-time home-workers) (20 percent of Cluster 2 had children/dependents). It was surprising that so many female Cluster 1 respondents, all full-time, and nearly 60 percent producing handicrafts away from home, had childcare responsibilities. A further test undertaken to make sense of this result was respondents' use of informal helpers. Namely, it was hypothesised that Cluster 1 producers made more use of informal helpers compared to Cluster 2 and especially Cluster 3 producers, which allowed them to maintain their status and premises despite their household responsibilities. To explore this, the type of helpers used by respondents in each cluster was examined. It was found that the use of helpers was significantly different across female cluster respondents (χ^2=11.150, p<0.001), namely, more than half of producers in Cluster 1 (52 percent) used full-time helpers in their production. This may explain why Cluster 1 respondents could continue to produce full-time and often away from home, in spite of their family status.

6.9.3 Personality Characteristics of Clusters

In terms of personality characteristics, results of One-Way ANOVA tests of the clusters revealed significant differences between clusters in terms of their ratings of self-confidence and perseverance. In terms of self-confidence, Cluster 1 members were found to be more likely to rate their self-confidence positively compared to

Cluster 2 and Cluster 3. This fits with results of previous studies. McClelland (1987), for example, proposes self-confidence as one of the characteristics which scholars have attributed to successful entrepreneurs. However, it was unexpected to find Cluster 2 members had the lowest ratings of self-confidence, as almost all of them had their operation in dedicated premises and earned medium sales turnover. An explanation could be that a large proportion of Cluster 2 respondents started their handicraft production in subsidised-government workshops. Perhaps their confidence was lowest because most of them had not started their business independently, but instead had relied on a lot of help from the government. In terms of perseverance, a very significant difference was found between the clusters, specifically, that Cluster 1 respondents were most positive and Cluster 3 respondents were most negative about their abilities to deal with setbacks. This result was logical and fits with previous studies that contend that entrepreneurs who hold persistently to their goals and who hate to give up increase their chances of start-up survival and performance (Timmons, 1985).

6.9.4 Personal Skills of Clusters

In terms of personal skills, the results of One-Way ANOVA tests showed significant differences between clusters in terms of their perceptions of their technical production, organising/planning and networking skills. For all of these, the key differences were between Cluster 1 and the other two clusters, and results were in expected directions. Namely, Cluster 1 members were more likely to rate themselves highly on their technical production, organising/planning and networking skills, compared to Cluster 2 and Cluster 3. The result supports findings of previous studies, in which organising skill (Baum & Locke, 2004) and ability to connect and interact with other people in a business (Lee & Tsang, 2001) are significant predictors of firm survival.

6.9.5 Motivations of Clusters

In terms of motivations, the results of One-Way ANOVA tests showed significant differences between clusters in terms of being motivated by income maximisation and following the advice and example of family/friends. For income

maximisation, Cluster 3 members were less likely to have income maximisation as a motivation, compared to Cluster 1 and Cluster 2. This result is logical and supports the findings of the in-depth interviews, where part-time, domestic interviewees explained how handicraft production was a way to make some extra income alongside family responsibilities. In terms of having family/friends' example as a motivation, Cluster 2 members were most likely to agree that they followed friends and family to get involved in handicraft production. This is interesting, as C2 respondents were most likely to be ex-incubator producers. It suggests that C2 members were advised by family and friends to get formal training before starting handicraft production, whether or not the family and friends were themselves involved in handicraft production, or running a business

6.9.6 Support Contexts of Clusters

Finally, in terms of support contexts, the results of the One-Way ANOVA tests revealed significant differences between clusters in terms of their ratings of government support, access to finance and access to reliable workers. For government support and access to finance, Cluster 2 members were most likely to agree that they received government support in handicraft production, whereas Cluster 3 members were least likely to agree with this aspect. This is a logical result, as Cluster 2 members were mostly ex-incubatees, who had received a lot of support in terms of training and financial assistance to start handicraft production. In comparison, it is logical that Cluster 3 respondents, being part-time home workers, could feel that they received little official help or support. In terms of access to financial resources, Cluster 3 respondents were least likely to agree they had access to finance for handicraft production. Like the previous result, it is logical that this type of producer would rate access to finance so lowly. In terms of access to reliable workers, Cluster 2 respondents were most likely to agree with this, whereas producers in Cluster 1 and Cluster 3 gave almost identical ratings on reliable workers. This interesting result suggests that producers who attended an incubator prior to starting their handicraft enterprise may be able to find labour in ways that other groups cannot. Smilor and Gill (1986) found that an incubator not only offer support services, and technical and business consulting services, but also allows

continuing contact with other trainees or entrepreneurs. This provides better opportunities to access other producers in the same area, to help them in their operation.

6.10 Summary and Discussion

This chapter has presented the results of the large scale survey of handicraft producers conducted for this thesis. The objectives were to investigate (i) the status, premises and performance of the respondents; (ii) their person-related and contextual characteristics; (iii) the relationship between status, premises and performance, and the person-related and contextual variables that might explain their differences. A key aim was to test whether higher performing handicraft producers are more likely to be full-time, workshop-based. In terms of profile, the survey respondents were mainly middle-aged, female, and making handicrafts at home on a part-time basis. The majority earned the lowest income categories from their production, but their profit levels were quite substantial. They mainly learned handicrafts as adults rather than inheriting a family business, but rated their entrepreneurial characteristics and skills quite highly. First analysis of respondents' status, premises and performance gave inconsistent results. Although there was some evidence of full-time, workshop-based producers having higher performance, the tests also showed a lack of clear difference between the profit levels of domestic and workshop producers.

Cluster analysis was performed to explore the relationship between status, premises and performance in a multivariate way. Three groups of respondent were identified. Cluster 1 –'high performance full-timers' (38 percent of the sample) were all full-time, evenly split between home-based and workshop-based production, and earned the highest sales turnover and profits. Cluster 2 'part time professionals' (26 percent of the sample) were almost all part-time and non-home based, earning medium sales turnover and lowest profits. Cluster 3 'part-time home workers' (36 percent of the sample) were entirely part-time, home-based, with lowest sales turnover but medium profits.

In terms of the factors that were significantly different across the three clusters, it was found that the 'high performing' C1 members were medium educated and least likely to have a previous source of income before handicraft production. They were

highly self-confident and persevering, and rated themselves highly on technical production, organisation/planning and networking. They were also motivated highly by income maximisation, and perceived they had access to finance more readily than other clusters. C2 members had the highest education level, attended incubator and had previous source of income before handicraft. These respondents had a negative perception of their self-confidence, though quite positive in perseverance, as well as in their production, organising and networking skills. They were motivated highly by family and friends, and were most likely to perceive they received support from the government and had access to reliable workers. Finally, C3 members had the lowest level of education and attendance on incubator courses, but some of them had previous income prior to handicraft production. They had positive perceptions of their self-confidence but were most negative about their perseverance. C3 members rated themselves as above average in production skills but lower in organising and networking skills. In terms of support received, C3 members were least likely to agree they received government assistance, or had access to finance or reliable workers.

Overall, the analysis of the survey data highlights how handicraft producers in Sabah are not homogenous, and it is interesting to reflect how and why the three identified clusters of handicraft producer are different. It may be argued that Cluster 1 producers' profile is most like the entrepreneur stereotype. They showed confidence, skills and commitment to handicraft production, and were also motivated by income maximisation. Cluster 3 respondents' profile is most like the rural handicraft stereotype; they rated themselves lower on entrepreneurial characteristics and motivations. However, it was interesting that they did not earn the lowest profits, so although they operated on the smallest scale, and juggled with other responsibilities, it seems they were efficient and could keep their costs low. Cluster 2 producers had a distinctive background profile and support context. They showed the strongest formal training and experience for handicraft production, and had received the most government support. It was interesting that although they rated themselves highly on entrepreneurial skills, they rated themselves low on self-confidence. It seems there was a gap between their training and experience, and their self-perceptions as operators of a handicraft enterprise.

The key purpose of the survey was to test whether full-time, workshop-based producers are more likely to be high performing than part-time, domestic producers. The results give only partial support to this proposition. Namely, the cluster analysis indicates that it is producers' status (i.e. full-time/part-time) that is most important to performance. Cluster 1, which showed both the highest sales and profit levels, was comprised of almost all the full-time producers in the sample. The implication seems to be that for high performance, full-time commitment and dedication is key, regardless of where production is based (home or workshop). But the cluster analysis also shows that premises do play a role in performance. Cluster 2 producers (almost all based in workshops) had lower profit levels than Cluster 3 producers (all home-based). Cluster 2 producers may have experienced higher costs than Cluster 3 producers because they operated from dedicated premises. However, perhaps because they operated on part-time basis, they could not deal well with those costs, unlike committed, full-time Cluster 1 producers. As a result, Cluster 2 producers had the lowest profit levels. The implication seems to be that if a handicraft producer intends to produce part-time, greater profits are likely if production is home-based rather than workshop-based. Another explanation for the low profit levels of Cluster 2 could be their training as ex-incubatees and high level of government support. Perhaps these producers find it difficult to make the move from trainee to operating and managing a workshop. They have low confidence levels, so perhaps do not make the right decisions, with negative impacts on their profit levels. If this explanation were valid, it would have implications for the type of training and support offered to ex-incubatees in the first stages of their businesses. Having presented and discussed the results of the survey, the next chapter presents the conclusion to the thesis.

Chapter 7 Conclusions

7.1 Introduction

This chapter brings together the overall findings of this research. Overall, the aim of this study was to investigate the commercialisation processes and performance of handicraft producers in Sabah, Malaysia. This study has identified the factors associated with handicraft producers' choices of commercialisation level, and has also tested the relationship between levels of commercialisation and performance. In-depth interviews and a large-scale survey were the phases of empirical research conducted to investigate these issues. The main findings and their implications are discussed further in the following sections. Section 7.2 provides a summary of main findings of the research, structured according to each of the research objectives. Then Section 7.3 presents the contribution of this research in terms of academic knowledge. Section 7.4 discusses the practical recommendations to government and policymakers. Section 7.5 presents the limitations encountered in pursing this research, and the final section (Section 7.6) discusses the direction and areas for future research.

7.2 Summary of Main Findings of this Research

This section summarises the key results of the research, with respect to the individual objectives.

7.2.1 Restatement of Research Rationale and Objectives

In Malaysia, the government views handicraft production as an advantageous source of tourism activity and channel for economic development. Various entrepreneurial development programs involving education and training, financial and credit assistance, as well as the development of physical and social infrastructure have been undertaken by the government in order to encourage handicraft producers in rural areas to become entrepreneurs. Under handicraft development programs, like One District One Product (ODOP), the Malaysian government clearly wishes to encourage full-time, workshop-based production, believing that greater levels of commercialisation will earn producers better incomes over part-time, home-based producers, and will contribute to more sustained economic development in the long-

term. Nevertheless, in Sabah, the vast majority of producers make handicrafts as a part-time or informal activity from their home. The research problem was to understand why 'modest' production is so favoured among handicraft producers in Sabah, despite its perceived disadvantaged status. Hence, this research aimed to investigate the behaviours and experiences of handicraft producers in the commercialisation process, and explore factors related to their performance and decisions on levels of commercialisation. The precise objectives for this research were as follows:-

i. To describe in detail the current nature of handicraft production in Malaysia and related government support for the sector.
ii. To identify from the literature in entrepreneurship and small firms how small firms contribute to economic development and the factors that influence the commercialisation decisions and performance of these firms, particularly in rural, developing country contexts.
iii. Through exploratory qualitative research, to investigate the perceptions and behaviours of handicraft producers in Sabah and the processes of commercialization that they go through, including factors that stimulate or prevent moves to a greater level of commercialisation.
iv. Through a large-scale survey, to investigate quantitatively the relationship between handicraft producers' status, premises and performance levels, and the factors that may influence them.
v. To offer recommendations to government and related support agencies on how to increase the effectiveness of support to handicraft production in a Malaysian context.

7.2.2 The Nature of the Handicraft Sector in Sabah, Malaysia: Policy and Practical Context

This research objective was addressed by a desk study and key informant interviews, reported in chapter 2. Sabah is the second largest of the thirteen states in Malaysia with a population of over three million people, of which 50.5% lives in rural areas. Since the 2000s, Sabah has been the poorest state, with economic activity relying on the service sector, agriculture and mining. Nowadays, the Malaysian

government targets rural, micro enterprise development as a source of economic growth, especially encouraging formal commercialisation of enterprises, and the handicraft sector is part of this. The Census of Sabah Handicraft Production (2008) states there are 2,182 handicraft producers in total in the region. Ninety-two percent of these are domestic, of which 43 percent are full-time and 57 percent part-time. Of the small number (eight percent) of producers that are workshop-based, the vast majority (92.6 percent) are full-time. Domestic producers are predominantly female, quite mature in age and generally do not hire employees. Eighty-two percent of part-time domestic and 50 percent of full-time, domestic producers earn less than RM 5,000 (lowest income category), although small numbers of domestic producers achieve much higher incomes. Workshop producers have the same maturity as domestic producers, but a slightly higher proportion of men (approximately one quarter), and are more likely to hire employees. A higher proportion of workshop producers also earn more than RM 15,000, although 23.5 percent of full-time workshop and 46.2 percent of part-time, workshop producers earn less than RM 5,000. The data on incomes reported in chapter 2 were interesting, they suggested a more complicated relationship between level of commercialisation (i.e. whether full-time/part-time status, and whether domestic or workshop-based) and performance.

7.2.3 Entrepreneurship and Handicraft Production – Theory and Evidence

This section summarises the main points of the chapter 3 literature review, on how, in theory, small firms contribute to economic development, how small firms grow, and which factors influence their performance. Under endogenous growth theory, small firms contribute to economic growth through local people being stimulated to develop enterprises based on local resources (Terluin, 2003). Endogenous growth can be encouraged by facilitating strategies, i.e. investments in research and development, education, training and knowledge centres to help local people to create their own enterprises based on local natural resources and own culture heritage Local handicraft production should be well suited to this kind of development strategy.

In terms of how small enterprises develop and grow, the 'stage-based models of development and growth' suggested by Cooper (1981), Davidsson & Honig (2003), Frank, et al, (2007) and Kessler & Frank (2009) imply that growth and transition from one level to a greater level of commercialisation is common, although it is widely acknowledged that the vast majority of small firms do not increase in size. In fact, few studies have investigated the process of transition to greater levels of commercialisation, in terms of move from part-time to full-time activity, or from home-based to dedicated premises. In any case, firms in rural areas or in handicraft sectors may follow different development pathways from other types of firm, as they face specific challenges in terms of access to resources and infrastructure, and/or have different motivations for starting a small enterprise (e.g. so-called 'lifestyle' or 'art-based' businesses). A far greater number of studies have investigated the factors influencing new venture creation or small firm performance. In general, these propose a combination of person-related (demographics, psychological traits, skills, goals) and contextual (e.g. supports from government, supports from family/friends) factors are important, and they propose different ways of measuring performance (e.g. direct and indirect measures).

In terms of the relevance of theories of small enterprise growth to the handicraft sector in Sabah, some limitations are acknowledged. For example, achieving firm growth through economies of scale can be problematic for handicraft firms because handicraft products' value relies on manual labour rather than mechanisation, and innovations in production may cause loss of product quality. In addition, most literature on rural and handicraft firms is based in western developed countries or on growth-oriented enterprises. Rural small enterprises in developing countries experience much less infrastructure support and access to resources compared with those in western countries, and may also have different motivations to the so-called 'art-related businesses' studied in those countries. In fact, in a developing country context studies argue that small enterprises achieve competitive advantage not through innovation or advanced production technology, but through developing social networks for access to resources and markets (Soldressen, et al, 1998; Bhagavathula, et al, 2010). For the current research, these differences suggested a need to study the Sabah handicraft producers on their own terms, through exploratory

method, to deeply understand their behaviour and the specific influences on their levels of commercialisation and performance.

7.2.4 Perceptions, Behaviours and Commercialisation Processes of Handicraft Producers in Sabah

This section summarises the results of the in-depth interviewing phase, reported in Chapter 5. The main objective of this phase was to investigate the processes of commercialization that handicraft producers had experienced, including what influenced them to move (or not move) to workshop production.

The results revealed that both domestic and workshop-based producers described quite similar opportunities and challenges relating to greater levels of commercialisation, (e.g. trade-off with family responsibilities/other work, exposure to assistance from family and government agencies), but they provided different perceptions based on their experiences as to how they had made their respective status and premises choices. For instance, some part-time/domestic producers mentioned that other than a lack of resources which prevented them from moving to full-time/workshop production, they viewed workshop production as costly compared to home-based production, and perceived it as not a worthwhile activity compared to farming. On the other hand, full-time/workshop producers perceived having reliable helpers and positive support from related government agencies as the reasons why they produced handicrafts in a workshop rather than from home.

In addition to these reasons, the way the interviewees spoke about their perceptions and their likes/dislikes revealed some insights into person-related factors which seemed to either stimulate or inhibit them to move to a greater level of commercialisation. For example, based on the testimonies, the part-time/domestic producers were inhibited to move to full-time/workshop production because they perceived they had a lack of skills in business and technical production. In contrast some full-time workshop producers demonstrated certain dispositions like independence, goal-orientation, self-interest and persistence, which seemed to enable them to achieve a greater level of commercialisation.

From a combination of insights from the literature and the in-depth interviews, a conceptual framework for investigating the factors influencing handicraft producers'

levels of commercialisation and performance was developed. Six categories of factor were proposed, namely, (1) demographic factors, (2) previous business background, (3) personality characteristics, (4) personal skills, (5) motivations and (6) support context. The propositions relating to these factors were taken forward to be tested in the survey research.

7.2.5 Factors influencing Status, Premises and Performance of Handicraft Producers in Sabah

This section now summarises the results from the large-scale survey, reported in Chapter 6. The aim was to investigate quantitatively the relationship between handicraft producers' status, premises and performance, and to test which person-related and contextual factors are influential to these things. Face-to-face structured interviews were conducted with 210 handicraft producers in Kota Belud, Sabah. Sixty-one percent of them made handicrafts on part-time basis, and 53% produced in their own home.

The results began with bivariate analysis of the relationships between handicraft producers' status, premises and performance. These results were mixed, namely, they showed some support for the idea that full-time, workshop-based producers have higher performance, but also showed the lack of a clear difference between the profit levels of domestic vs. workshop producers, and showed quite a high proportion of full-time producers with low sales turnovers. In terms of the person-related and contextual factors influencing producers' status, premises and performance, bivariate analysis found only nine out of the 40 variables in the questionnaire showed a significant relationship with status, premises and performance, namely: sales channels used, length of time in handicraft production, whether handicraft is made alone or not, levels of self-confidence, perseverance, organising/planning skill and networking skill, and access to finance and access to raw materials. Other variables showed a significant relationship with only one or two of the three key variables, for example, a significant relationship was found between gender and premises, but not for status and performance.

The relationships between status, premises and performance, and the factors that influence them, were, therefore, tested using a multivariate technique. A cluster

analysis was performed on the variables of status, premises and performance, which generated three distinct clusters. Univariate analysis (One-Way ANOVA tests) was then undertaken, to test for significant differences between the clusters in terms of the person-related and contextual variables. The results were as follows.

Handicraft producers falling in Cluster 1 (high performance full-timers) earned the highest sales turnovers and highest profits, were all full-time producers, and quite evenly split between home-based and workshop-based production (with a greater proportion producing in their own workshop). In terms of person-related and contextual factors, Cluster 1 respondents tended to be medium educated and least likely to have had a previous source of non-handicraft related income before handicraft production. They were also highly self-confident and persevering, and rated themselves highly on technical production, organisation/planning and networking skills. They were motivated highly by income maximisation, and perceived they have had access to finance more readily than other clusters. Cluster 1 respondents support a link between the status and performance of an enterprise, i.e. high performing enterprises are those devoting high commitment (full-time basis) (Thompson, Jones-Evans & Kwong, 2009; Roberts and Robinson, 2010). Nevertheless, interestingly Cluster 1 respondents do not support a link between type of premises and performance, as there was an even split between home-based and workshop-based respondents in this cluster. Thus, the result is not consistent with earlier research by Walker and Brown (2004), who propose that home-based enterprises tend to not make significant contributions to income.

Cluster 2 respondents (part-time professionals) all produced part-time, almost all outside the home, half in government workshops. They showed medium levels of sales turnover but earned the lowest profits. In terms of significant relationships to factors, Cluster 2 respondents had the highest education levels, were most likely to attended incubators and to have had previous sources of income before handicrafts. They had negative perceptions about their self-confidence, though were quite positive on perseverance, as well as on their production, organising and networking skills. It was interesting to find that in this workshop-based cluster, the respondents were more motivated highly by family and friends than income maximization, which

contrasts with Walker and Brown (2004), who contended that financial goals are the important motivation for externally-based enterprises.

Finally, Cluster 3 respondents (part-time home workers) were entirely part-time, home-based producers. They earned the lowest sales turnover but medium profit levels (higher than part-time professionals). This cluster had the lowest level of education, and never attended courses in incubators, though some of them had previous non-handicraft related income prior to handicraft production. They tended to have positive perceptions about their self-confidence but were most negative about their perseverance. They also rated themselves as above average in production, but were less positive towards their organising and networking skills. Compared with Cluster 1 and Cluster 2, members in this cluster provided modest ratings on both income maximization and family/friends as their motivators. This supports earlier research (Walker & Brown, 2004) and the in-depth interviews that non-financial motivations are significantly important for home-based enterprises. In terms of support received, this cluster tends to give the lowest ratings for government assistance, access to finance and access to reliable workers.

7.3 Academic Contribution of this Research

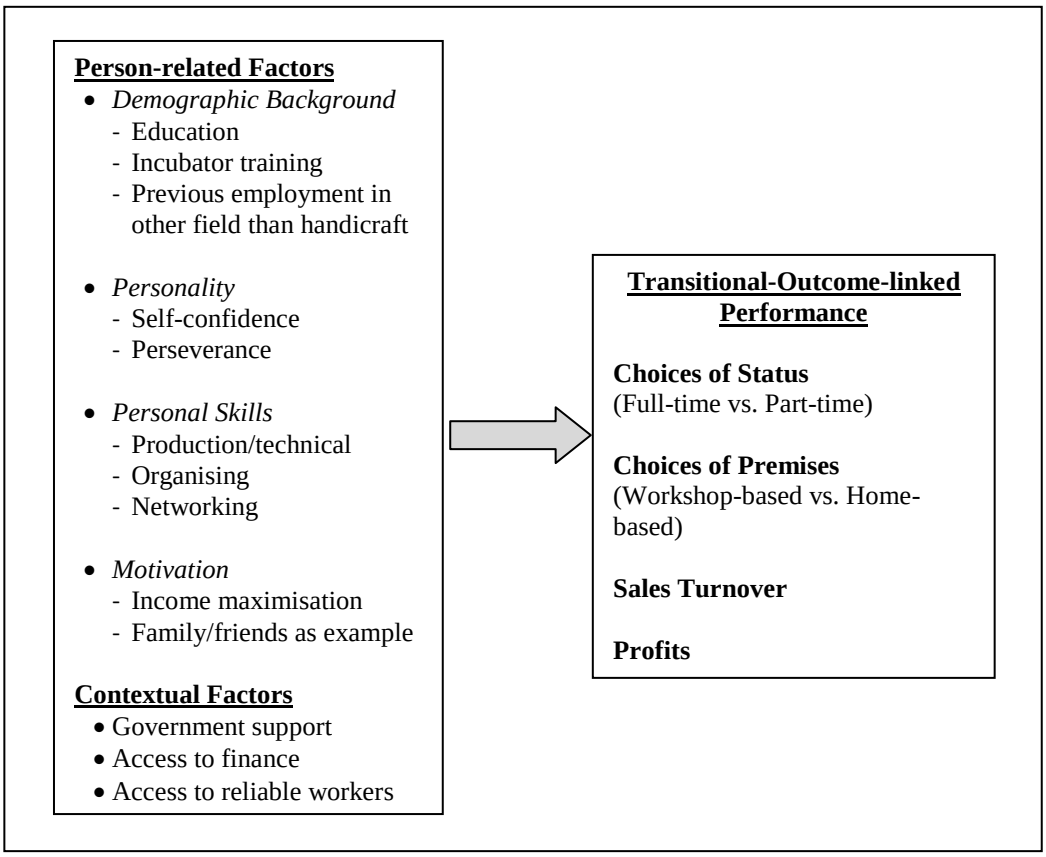
This section provides the contribution of this study with respect to academic research and existing knowledge of concepts and processes relating to small enterprise development and performance. In the context of handicraft producers in Sabah, this research finds that the relationship between greater levels of commercialisation (i.e. move to full-time status and dedicated premises) and performance is not straightforward, namely, a clear positive link exists between full-time status and performance, but not for premises and performance. The result suggests a need to reconsider ideas about how greater levels of commercialisation influence performance levels of small firms, especially in handicraft sectors. It was found that production status (full-time/part-time) is the important factor influencing performance in terms of both sales and profits, i.e. producers who take up a full-time handicraft production generate greater annual sales revenues and profits compared to part-timers. Nevertheless, producers' choices in terms of type of premises (home-based/workshop-based) were also found to have an impact on performance, in terms

of profit level only, i.e. part-time producers who produce in a workshop earn less profit than part-time producers at home. Analysis found that this could be due to the costs incurred from workshop production, for example, the cost of full-time labour, costs of transportation and marketing costs.

From an academic perspective, this study also contributes understanding of which factors influence the levels of commercialisation and performance of small enterprises in a developing country, handicraft context. It was found that these were significantly influenced by producers' education level, training in an incubator, previous income activity/ job prior to handicraft production, self-confidence, perseverance, skills in production/technical, organising/planning and networking, income maximisation motivation and examples/advice from family/friends, received support from government agencies, and access to finance and reliable workers. These results highlight the importance of taking into account both person-related and contextual factors in the study of small enterprise development and performance. Although this study focused on micro-scale, craft-related businesses in rural areas, it may provide valuable insights due to its focused and in-depth investigation on the processes of commercialisation, and results that handicraft producers' decisions on commercialisation and performance can be influenced by their personal characteristics, motivations, skills and external supports needed throughout their commercialisation process.

In addition, in terms of the implications of the study for the initial conceptual framework, this study confirms the original framework of previous research in terms of the factors that influence small firm performance. That is, small firm performance is influenced by a combination of person-related factors and contextual factors. However, this study has contributed some new dimensions into the initial framework, especially regarding the relationship between performance and production status and premises, and on which of the factors highlighted in the literature play the most important role for handicraft producers, for example, self-confidence, networking skills and income maximization. Figure 7.1 shows the modified form of the conceptual model, reflecting the key findings of the study.

Figure 7.1: *Modified Form of the Conceptual Model based on Key Findings of the Study*



As can be seen from Figure 7.1, the model proposes that small firm performance (sales and profits) is linked closely to two transitional outcomes (choice of status and choice of premises). In terms of the person-related factors that influence these outcomes the most, the model proposes that education, incubator training, previous employment in a field other than handicraft, self-confidence, perseverance, production skills, organising skills, networking skills, a focus on income maximisation and the role of family/friends as examples, are highly influential. In terms of the contextual factors that are most influential to these outcomes, the model proposes that government support, access to finance and access to reliable workers are highly influential.

This research also contributes to the literature on small-scale, craft-related enterprises. Entrepreneurship studies are predominantly based in western, developed countries, where handicraft firms are regarded as so-called 'art-based businesses' and producers in developing countries viewed as homogenous. The current research reveals handicraft producers in rural Sabah as a distinct and heterogeneous group,

which can be classified into three types (i.e. 'high performance full-timers', 'part-time professionals' and 'part-time home workers'). The first group especially ('high performance full-timers') reveals levels of skill, motivation, goals and performance not normally linked with developing country craft-firms in the literature. Only one group in this typology ('part-time home workers') conforms to the stereotype of developing country craft-firm, and nevertheless these producers show quite high profit levels. The exploration for reasons behind this surprise result revealed that sales outlets and types of helper could contribute to these producers' performance. It was found that part-time home workers tended to sell in the local village and have temporary helpers among family members, this could lead to low costs associated with transportation, marketing, management and wages, thus could provide higher profit levels. Therefore, the research highlights the value of studying handicraft enterprises as heterogeneous, and investigating deeply the factors contributing to commercialisation process and performance. The results may challenge assumptions about behaviour and operations of handicraft enterprises in developing country context.

The evidence of this study also provides valuable insights to knowledge of female entrepreneurship, namely, that for female producers of small-scale craft-related enterprises, those who are married with children can still devote their commitment to a greater level of commercialisation (full-time, workshop production) by juggling their handicraft production with household and childcare responsibilities. This findings contrast with earlier research that married women with children, particularly housewives, are more likely to operate part-time, domestic businesses (Gough, 2010; Walker & Brown, 2004; Tipple, 1993; Shabbir & Gregorio, 1996). In the current research, it was found that producers who were wives and mothers engaged full-time helpers in their production, which allowed them to operate on a full-time basis and often away from home, in spite of their family status.

7.4 Recommendations to Government and Policymakers from this Research

A key objective of the current research is to provide recommendations to government and related support agencies on how to increase the effectiveness of support to handicraft production in a Malaysian context. Despite government

encouragement for formal commercialisation (full-time, workshop production) among small-scale, craft-related enterprises in Malaysia, the vast majority of handicraft production in Sabah is home-based, mainly on a part-time basis. The evidence from this study revealed that part-time/home-based production is so favoured among handicraft producers in rural Sabah because of the challenges and risks they see with being full-time or producing in a workshop, especially in terms of resources and management skills needed to take-up this so-called 'formal commercialised' production. In addition, part-time/home-based production is seen as convenient and flexible to fit around household work. In fact, evidence from this study also revealed a considerable proportion of home-based producers managed to earn high incomes similar to workshop-based producers, regardless of their modest commercialisation. Therefore, the decision towards location of production (premises) seems not to be an important threshold to high performance; instead, the amount of time devoted by producers for handicraft production (status) is the important factor. These and other results have implications for effective programs to support handicraft production in rural areas in Malaysia, linked to how handicraft enterprise should be positioned in the rural sector. It is suggested that the MHDC should extend the policy initiative of the handicraft entrepreneur development program through greater emphasis on how to encourage the less committed entrepreneur (i.e. part-timers) to take their business forward, on a full-time basis. Existing programs organised by the government Handicraft Incubator Training initiative organised by the MHDC and the One District One Product (ODOP) program focus training in classroom and workshop environments, where training is completed in a modular way. Instead, the MHDC could make more use of successful full-time handicraft producers as role models or mentors to motivate part-timers in terms of marketing and developing networking skills. It is suggested that handicraft production is not necessarily done in a workshop when home-based production can provide a satisfactory income for producers themselves, their family and the wider economy.

In relation to home-based producers, the in-depth interviews revealed that some producers started their production on a part-time basis because it gave them flexibility of time in the context of their domestic duties. Some of them were very resourceful when they made use of the available space in their houses for handicraft

production. This suggests that the government should promote home-based handicraft production for income-generating activities in rural areas. It is recommended that the government should be more tolerant in terms of business registration policy and ensure the provision of adequate infrastructure to allow the potential for more full-time, home-based production to be developed in rural areas. Greater attention must be paid also to women who actively make handicrafts for sale while juggling with their household responsibilities. It is possible that this craft-related activity could be treated more as community-based tourism, for instance encouraging the producers to link their home-based production with home-stay activity which would provide opportunities to tourists to experience the process of making handicrafts traditionally at producers' houses. This may influence some of the part-time, home-based producers, especially the women, to commit to a greater level of commercialisation and earn better incomes.

Results of this study also showed in relation to perceptions of external support, workshop-based producers perceived they received satisfactory levels of support from government agencies and access to reliable workers, while full-time producers tended to have positive perceptions towards access to finance. These results provide insights to policy makers or related government agencies like the Malaysia Handicraft Development Corporation and Ministry of Rural Development that a key factor confronting handicraft producers in Sabah to expand their level of commercialisation is the availability of handicraft makers (workers) to produce handicrafts, and the availability of finance for continuous production. It is suggested that other than provision of financial assistance or subsidies to handicraft producers, the government handicraft training programs should be more emphasised on development of awareness or interest among potential handicraft producers about business knowledge, especially on how to improve production and marketing rather than craft making skills per se. This may develop interest among trainees or potential handicraft producers to commit highly to handicraft production as craft entrepreneurs, as well as be workers to other handicraft producers. This may also provide handicraft producers with opportunities to collaborate and develop their own network in production with other potential craft makers in the village, whilst

allowing better access to supplies of materials and market outlets, thus handicraft workers in production may be less needed.

In summary, this study has found that for many producers, handicraft production can generate good returns, and these producers can receive incomes comparable to production operators in the manufacturing sector or clerical workers in the government sector in Malaysia. By employing other villagers and linking handicraft production to homestay initiatives and tourism, wider economic benefits can also be generated. However, there is a proportion of handicraft producers who generate very low incomes. If those incomes are the household's main source, it is not financially viable for these producers to stay in handicraft production. The government needs to identify such producers and encourage alternative kinds of employment.

7.5 Limitations of the Current Study

The current study employed three phases of fieldwork including key informant interviews, in-depth interviews with handicraft producers and a large-scale survey, to investigate carefully the current nature of handicraft production in Sabah, the relationships between handicraft producers' status (full-time/part-time), premises (workshop/home-based) and performance, and the factors that influence these things. The findings so far have contributed considerable information about types of handicraft producers in Sabah and their characteristics, based on respondents' own personal experiences and perceptions. Nevertheless, this study was limited to producers in one district of rural Sabah – Kota Belud. In addition, this study included handicraft producers who were still quite new in handicraft production (5 to 6 years), as well as those who were already mature in their business (more than 6 years). Therefore, some profile characteristics of the sample may have implications for the generalisability of the results, in terms of respondents' perceptions about their behaviours, decisions and experience.

In terms of current information on the nature of handicraft production in Sabah, up-to-date statistical data were not available for review. The only relevant report available was the Malaysian Handicraft Development Corporation census for 2008. Lack of up-to-date information on handicraft producers' names and contact details led to a longer time consumed for approaching the targeted survey sample.

Furthermore, the respondents were scattered in several villages in Kota Belud, each of which was visited by the researcher independently, this involved a longer time and days for the survey to be completed.

In terms of methodological issues, the development of the questionnaire for the large-scale survey went through a modest validity process, and not quantitative reliability tests – (1) questions were developed on the basis of an analysis of the relevant literature and the propositions developed based on findings from in-depth interviews, (2) feedback from a panel of experts was included (key informant interviewees and researchers in a similar field), (3) a pilot test of the questionnaire was conducted to a targeted sample in Kota Belud, Sabah, to gather feedback on the terms used and coherence of the questions. With those validity processes, it is hoped that the threat to reliability in this study is compensated.

Regarding the questions on perception variables, namely personal characteristics, skills, motivations and support context, each variable was measured by a single statement, not a set of items like has been widely used in many earlier studies. Nevertheless, in this study, each statement relating to a measure was derived from a combination of the findings of in-depth interviews, previous literature on how these measures are defined and conceptualised, as well as discussion with research experts. Besides, it is believed that the use of single statements relating to measures, as borrowed from existing studies (Townsend, Busenitz & Arthurs, 2010; Chaganti & Chaganti, 1983; Taormina & Lao, 2007), can allow better responses from the respondents compared with multiple items, which may cause confusion or exhaustion. In relating to dependent variables of performance, two financial variables were used, namely annual sales turnover and percentage of profits. It is acknowledged that non-financial success indicators like creating jobs for the people, improving family's standard of living, or recognition from the government, are also important indicators for performance especially for craft-related enterprises or mature enterprises. Financial measures were used in this study to correspond with the perspective of the Malaysian government on handicraft production, as a source of economic development in rural areas.

Several challenges were faced by the researcher when conducting fieldwork, for example, the differences in terminology used especially for technical words, for

example, the word *'perakaunan'* (accounting) is not familiar to rural people especially with low education levels, therefore, the appropriate word with similar meaning was used – *'buku kira-kira'* (bookkeeping). Next, the questions which asked respondents to make their judgments on statements based on five-point Likert-scales were quite challenging, when some of the respondents tended to give ambivalent responses on every statement. Probing was used to guide them to give their actual responses; nevertheless, it posed a threat to biased responses rather than sincere responses.

Despite the limitations and challenges of conducting this research, it is hoped that desirable measures taken to reduce the drawbacks may compensate the work and not detract from the value of this research. It is believed that the scope of the study in terms of the sample (small-scale handicraft producers), geographic area (rural Sabah – Kota Belud) and field of study (decisions for levels of commercialisation and performance) can allow the findings to be adequately generalisable.

7.6 Avenues for Future Research

First, this study has proposed three types of producer in the handicraft sector, namely 'high performance full-timers', 'part-time professionals' and 'part-time home workers', whose membership is based on producers' production status (full-time/part-time), premises (workshop/home-based) and performance. This study found significant differences between the groups in relation to the main help/assistance they received in their production and marketing. Therefore, it is recommended to investigate this issue further, by concentrating on how handicraft producers market their products, particularly relating to formal and informal networks developed throughout the value chain, for example the role of family and friends, villagers, informal middlemen, government intermediaries, suppliers and customers.

Second, it is found from the results that besides financial criteria, non-financial rewards like being able to educate others, able to pursue own interests, as well as to build your own house, were also mentioned by some of the producers when talking about their motivations towards handicraft production. Therefore, non-financial criteria need to be taken into consideration when analysing the performance of an

enterprise or entrepreneur. Non-financial measures may also be indicators to overall economic and social well-being. It is proposed that other than sales and profits, there may be other important indicators for performance, for example, creating jobs for people, improving families' standards of living, or gaining recognition from the government, especially for craft-related enterprises or for mature enterprises. It is recommended that future studies take these kinds of measures into account.

Third, results of this study found differences between handicraft producers' lengths of time in handicraft production and their status, premises and performance. This suggests the age of enterprise may have an impact on owner's level of commercialisation and performance. Therefore, other than person-related factors that may be influential throughout their commercialisation, future research could concentrate on sources or types of assistance they have had since their initial production and that they are receiving in their current production.

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Appendix 4.1: Codes and Categories derived from In-Depth Interviews

Research Question 1: How do interviewees start-up their enterprise?				
1.1	**1.2**	**1.3**	**1.4**	**1.5**
How do interviewees first get involved in handicraft production?	Other people involved in start-up/ move to commercial production	Perceived resources needed for start-up/move to commercial production	Factors which inhibited/delayed start-up to commercial production	Factors which stimulated/facilitated start-up/move to commercial production
➢ Helping mother, as teenager, enjoy sewing (#1) ➢ Helping mother, as child, though found weaving difficult (#2), ➢ Helping mother, as teenager, during free time (#4) ➢ Helping mother, as child, never been to school, all girls were taught the art of weaving (#12) ➢ Helping mother, as teenager, sell to relatives (#15) ➢ Attending courses, after left school/after graduated (#3, #8) ➢ Learnt from skilled	➢ Family - Mother /father taught skills (#1, #2, #4, #6, #11, #12, #15) - Mother/father set example of making/selling handicraft business decision (#1, #2, #4, #13), - Production equipment inherited/provided by family (#1, #6, #9, #10, #12, #13, #15 - Husband's network (#7) - Aunt, who is also a master craftsperson (#8) - Relatives placed order (#13, #15)	➢ Machinery (#1, #3, #8, #10 ➢ Raw materials (#1, #8, #14 ➢ Attitude of self-reliance, resourcefulness (#2, #4, #7, #9, #13, #15 ➢ Passion, great interest, perseverance (#3, #5, #6, #11, #12, #13, #14 ➢ Fate/ luck (#2, #9, #14) ➢ Skills/knowledge/experience/creativity (#2, #3, #4, #5, #7, #8, #9, #10, #12, #13, #14) ➢ A proper production space/building/workshop (#3, #4, #5, #6. #8, #14, #16)	➢ Family responsibilities - As wife/mother, household chores (#1, #2) - Childcare (#1, #2) - As son, help parents in their business (#16) ➢ Family transition - Move to new household after married (#1) ➢ Trade off with other work/other income possibilities/further study (#1, #2, #3, #4, #5, #6, #13, #15) ➢ Lack of skills/	➢ Family supports - Husband's supportive attitude/help (#1, #12, #15) - Mother's / father's supportive attitude/help (#4, #8, #12, #13) ➢ Friends (#1, #2, #7, #9, #10, #13) ➢ Personal motives/goals - To gain extra income (#1, #2, #4, #6, #7, #10, #13, #16) - To support family (#5, #7, #9, #12, #13)

Research Question 1: How do interviewees start-up their enterprise?				
1.1	**1.2**	**1.3**	**1.4**	**1.5**
How do interviewees first get involved in handicraft production?	Other people involved in start-up/ move to commercial production	Perceived resources needed for start-up/move to commercial production	Factors which inhibited/delayed start-up to commercial production	Factors which stimulated/facilitated start-up/move to commercial production
person/elderly(#5, #7, #9, #13, #14 ➢ Skills inherited from parents/tradition since teenager (#6, #10 ➢ Learnt from mother, as teenager, doing nothing, did not went to school (#11) ➢ Helping uncle un his workshop, as teenager during free time (#16)	- Uncle sets example of making and selling handicraft (#16) ➢ Friends - Friends placed order/suggested a business idea [e.g pricing decision (#1), product idea (#2) - Friends as government contact person (#1, #12), - Friends/ neighbours who also make handicrafts (#6, #7, #9, #14, #15) ➢ Other individual - Chief incubator/trainer (#3, #15 - Officer/Staff from related government agency (#7, #12) - village headman asked to	➢ Government supports (#4, #5, #6, #8, #11, #13, #14 ➢ The importance of customers' comments/critiques (#7) ➢ The importance of product quality (#7, #13, #14) ➢ Making handicraft at home (#7, #8) ➢ Social/business networks (#10, #12, #13, #14) ➢ Export market [e.g to west Malaysia (#14)] ➢ Related events/festivals/celebration supporting sales (#14) ➢ Absence of young successor in craft making (#15)	knowledge/experience in related field (#3, #5) ➢ Shortage of workers/no helpers (#10, #11, #15) ➢ Getting old (#11, #14) ➢ Lack of promotion, just stay in the village (#11) ➢ Money/funds (#7, #13)	- As hobby during free time, making handicraft is a fun thing to do, relaxing (#2, #4, #5, #&, #15) ➢ Government supports/incentives - Craft making skills, business knowledge (#1, #2, #7, #10, #13) - Raw materials/equipments/production space/marketing (#1, #2, #3, #7, #8, #10, #11, #12, #13, #14) - Government recognition/appointed as important person for

Research Question 1: How do interviewees start-up their enterprise?				
1.1	**1.2**	**1.3**	**1.4**	**1.5**
How do interviewees first get involved in handicraft production?	Other people involved in start-up/ move to commercial production	Perceived resources needed for start-up/move to commercial production	Factors which inhibited/delayed start-up to commercial production	Factors which stimulated/facilitated start-up/move to commercial production
	join the craft workshop (#2), - Teacher, soldier placed order (#9, #16 - Villagers placed order (#11, #12)			handicraft production (#8, #10, #11, #12) ➢ Social/ business networks/associations (#2, #7, #8, #13) ➢ Self interest, self support, private agency (#3, #4, #7, #13, #14) ➢ Private agency - Loan from illegal credit agency (#7) ➢ Continuous demand/regular customers (#12, #15) ➢ Workers/helpers (#12)

Appendix 4.2: Questionnaire

Location Ref: Census Ref. No: Survey Ref. No:

Investigating Producers Level of Involvement and Performance in Handicraft Production in Sabah, Malaysia

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Hello, I am Noor Fzlinda Fabeil, I am a PhD student at the University of Edinburgh, United Kingdom and also the academic staff of Universiti Malaysia Sabah, Malaysia. In this study, I am interested in finding out about how and why people are involved in commercial handicraft production. I would like to ask you some questions about yourself and the handicraft work you do. There are 54 questions; it should take not more than 30 minutes to complete. All answers are completely anonymous, and results only will be used for research purposes. There are no 'right' or 'wrong' answers, so please answer as honestly as possible.

Section A: About Your Background

(Please can you tell me.....)

Q1: Your age:

19 and below		1.
20 to 29		2.
30 to 39		3.
40 to 49		4.
50 to 59		5.
60 to 69		6.
70 to 79		7.
80 and above		8.

Q2: Your gender:

Male		1.
Female		2.

Q3. Where do you live?

Wooden house		1.
Brick house		2.

Q4. Your family status:

Married (with no children/dependent)		1.
Married (with children/dependent)		2.
Single/unmarried/widowed (with no children/ dependent)		3.
Single/unmarried/widowed (with children/dependent)		4.

Q5. The highest level of qualifications you have achieved:

No formal schooling		1.
Finished primary school		2.
Finished secondary school		3.
Certificate/Diploma from institute/university		4.
Degree from institute/university		5.

Q6. Have you ever attended courses on handicraft under incubator/apprenticeship scheme?

No		1.
Yes		2.

Q7. Do you have other sources of income beside handicraft work currently? (Tick only ONE, if more than one, ask for MAIN source)

Handicraft is my only income		1.
Self-employed (e.g: farming, fisherman, selling farm products at the market, clothes making, village work)		2.
Permanent salaried work (e.g: clerk, teacher, technician)		3.
Part-time salaried work (e.g: helping parents/relatives/friends in their business)		4.
Other, specify		

Q8. Have you ever gained an income from other activities than handicraft?

No		1. (Proceed to Q10)
Yes		2.

Q9. If yes, what type of job did you do?

Self-employed (e.g: farming, fisherman, selling farm products at the market, clothes making, village work)		1.
Permanent salaried work (e.g: clerk, teacher, technician)		2.
Part-time salaried work (e.g: helping parents/relatives/friends in their business)		3.
Other, specify		

Q10. Do your parents run a business?

No		1. (Proceed to Section B)
Yes		2.

Q11. If yes, what business do they run? _____

Section B: About You

In this section, I would like to know more about how you see yourself. Please remember there are no right or wrong answers, give your view as honestly as you can.

B1: Please rate your agreement/disagreement with the following statements.

Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
1	**2**	**3**	**4**	**5**

No.	Items	Circle the suitable answer				
Q12.	I strongly belief in my ability to achieve the things I want	1	2	3	4	5
Q13.	I much prefer to do things for myself, rather than rely on fate or other people	1	2	3	4	5
Q14.	I find that unexpected setbacks really stop me from achieving what I want	1	2	3	4	5
Q15.	I plan for new and better ways of doing things to improve performance	1	2	3	4	5

B2: For the following list of activities, please rate your own abilities, as you see them, based on a scale given.

Poor	Below Average	Satisfactory	Above Average	Excellent
1	**2**	**3**	**4**	**5**

No.	Items	Circle the suitable answer				
Q16.	Handicraft making skills and equipments handling	1	2	3	4	5
Q17.	Organising and planning for production and selling	1	2	3	4	5
Q18.	Ability to connect with other people for generating new ideas, solving problems and developing new business.	1	2	3	4	5
Q19.	Accounting/ bookkeeping skills	1	2	3	4	5

B3: To what extent do you agree or disagree with the following statements, based on scale given.

Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
1	**2**	**3**	**4**	**5**

"The reason why I have chosen to be involved in handicraft production is because….."

No.	Items	Circle the suitable answer				
Q20.	It is a convenient way to make extra money alongside my other job/ responsibilities	1	2	3	4	5
Q21.	It is a very good way to make the highest income I can, compared with other alternatives	1	2	3	4	5
Q22.	I really enjoy making handicraft, it is my passion	1	2	3	4	5
Q23.	I want to contribute to my cultural heritage	1	2	3	4	5
Q24.	I am following the advice, or the example of my family or friends	1	2	3	4	5
Q25.	It allows me to be independent	1	2	3	4	5

Section C: Your Immediate Environment

Finally, I would like to ask you some questions about things in your immediate environment. Please rate you agreement or disagreement with the following statements.

Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
1	**2**	**3**	**4**	**5**

"In your handicraft production, to what extent have you experienced the following…?"

No.	Items	Circle the suitable answer				
Q26.	Emotional supports from friends, relatives and family	1	2	3	4	5
Q27.	Technical supports from friends, relatives and family	1	2	3	4	5
Q28.	Support from government agencies	1	2	3	4	5
Q29.	Ease of access to finance when needed	1	2	3	4	5
Q30.	Ease of access to reliable workers	1	2	3	4	5
Q31.	Ease of access to raw materials and production equipments	1	2	3	4	5
Q32.	Ease of access to sales opportunities	1	2	3	4	5
Q33.	Flexibility of time for handicraft production	1	2	3	4	5

Section D: About Your Handicraft Work

(Please can you tell me....)

Q34. What type of handicrafts do you make?

Forest-based (e.g: woven baskets, bags, trays, plates, mats, hats, and the like)		1.
Textile-based (e.g: clothes, rib shawl, cushion cover, table cloth, etc)		2.
Metal/mineral based (e.g: parang, brass gong, and the like)		3.
Beadwork (e.; bangles, necklace and the like)		4.
Earthen-based (e.g; ceramic, pottery and the like)		5.

Q35. When did you first learn how to make handicrafts?

Childhood		1.
Teenager		2.
Adult		3.

Q36. In your handicraft production, do you consider yourself a full-time or part-time producer? Before this, were you full-time/part-time producer? *(Note: compare with census record in advance)*

	Current		Before this, were you full-time/part-time?	
	Tick	For how long? (months/years)	Tick	For how long? (months/years)
Full-time				
Part-time				

Q37. Where do you produce your handicraft currently?

Own home		1.
Own workshop		2.
Government workshop		3.
Neighbour house		4.
Other, specify		

Q38. What is the **main** reason to produce in the abovementioned location? (Tick only ONE)

Family commitments (household work, childcare)		1.
Convenience in term of time flexibility		2.
Inherited parent's business		3.
Involve low cash capital		4.
Government subsidised it		5.
Comfortable to produce		6.
Suitable for collective work		7.
Other, specify		

Q39. Do you make handicraft alone?

No		1.
Yes		2.

Q40. If No, who is your **main** source of help? (Tick only ONE)

		Full-time?		Paid?		
		No	Yes	No	Yes	
Relatives (kin)						1.
Friends						2.
Neighbours						3.
Local labour						4.
Regional labour						5.

Q41. Do you register your business (handicraft production) with Business Registrar?

No		1.
Yes		2.

Q42. How do you operate the business in term of ownership?

Sole-proprietorship		1.
Partnership		2.
Other, specify		

Q43. Have you ever received other external support/assistance in your handicraft production?

No		1. (Proceed to Q46)
Yes		2.

Q44. If yes, what was the **main** source? (Tick only ONE)

Government agencies		1.
Non-government agencies		2.
Family		3.
Friends		4.
Other, specify		

Q45. If yes, what kind(s) of support have you received? (Tick ALL THAT APPLY)

Assistance received	Financial assistance	Direct assistance	
Production equipments/ tools			1.
Raw materials			2.
Production space (e.g: workshop)			3.
Sales/ marketing (e.g: government place orders, packaging, exhibition, retail outlet, business cards)			4.
Technical skills			5.
Other, specify			

Q46. Which outlets do you sell your handicrafts to?

Outlets	Estimate percentage in sales value	
Selling at market (tamu) yourself		1.
Tourist or customer come to your place / personal order		2.
Selling at own handicraft shop		3.
Private middleman/traders (orang tengah)		4.
Private retailers (e.g: private craft shop)		5.
Government intermediaries (e.g: government subsidiary craft shop, government agencies place orders/government contract)		6.
Participating in trade fares/ exhibition in Sabah		7.
Participating in trade fares/ exhibition outside Sabah		8.
Other, specify		

Q47. Where do you sell **<u>most</u>** of your products? (Tick only ONE)

local village in Kota Belu		1.
other districts in Sabah region		2.
Outside Sabah (other states in Malaysia)		3.
Internationally (outside Malaysia)		4.

Q48. Have you invested anything in your handicraft business in the last 5 years?

No		1. (Proceed to Q50)
Yes		2.

Q49. If yes, what are the investments? (Tick ALL THAT APPLY)

Use new production equipments		1.
Expansion of production space		2.
New raw materials		3.
New product line		4.
New product design (size, colour, shapes, pattern)		5.
New management (bookkeeping, workers)		6.
Other, specify		

Q50. Who is your **main** source of information in starting and continuing your handicraft business?
(Tick only ONE)

Relatives		1.
Friends		2.
Government agencies (incubator, seminar/ talks, courses)		3.
Customers		4.
Suppliers		5.
Traders		6.
Banks		7.
Other, specify		

Q51. How often do you meet them?

Very infrequent (annually)		1.
Infrequent (monthly)		2.
Frequent (weekly)		3.
Very frequent (daily)		4.

Q52. Number of people you employed (paid) in your handicraft production in last 3 years (per annum)?

Year	Number of employees
2007	
2010	

Q53. On average, how much is your sales turnover of your handicraft products, in 2007 and for the last 12 months/ most recent year? *(Total income from sales (specifically from their own handicraft production only) before any deductions for cost, tax, etc)*

Year	Sales Turnover
2007	
2010	

Q54. On average, estimate the percentage of your sales turnover which is profit, in 2007 and 2010?

Year	Profit
2007	
2010	

Thank you.

Notes and Definition of Terms

	Terms	Definition	Term in Malay
Q45	Sales value	Total income received from making and selling their own handicraft	Jumah jualan kraftangan sendiri (in RM)
Q53	Sales Turnover	Total income from sales before any deductions for costs, tax, etc.	Pendapatan kasar dari jualan kraftangan sendiri (in RM)

Sources for Statements Development

B1 (Personality factors) – refers to inherent disposition or aptitude of a person.
Four main measures related to personality factors are derived from the initial findings (in-depth interviews). The development of statements for each measure is adopted from previous literature on how these measures are defined and conceptualised.

Question No.	Measures for B1	Definition	Sources
Q12	Self-confidence	Expected probability in his or her own ability to complete a task or meet a challenge.	McClelland (1987)
Q13	Self-reliance	A person's preference for doing things and making decisions without the help of others.	Duchesneau (1987) in Lee and Tsang (2001)
Q14	Perseverance	A trait that involved sustaining goal-directed action and energy even when faced with obstacles.	Baum and Locke (2004)
Q15	Achievement orientation	A desire to do well in order to attain a feeling of accomplishment. Ability to see and act on opportunities, efficiency orientation, high quality work, systematic planning, striving for excellence.	McClelland (1987), Chell, et al (1994), Lee and Tsang (2001)

For B2 (Personal skills) and B3 (Motivation), the measures are derived from findings from previous fieldwork (in-depth interviews) as well as discussion with supervisor.

Social networking (Q50, Q51):

- Krueger, et al (2000) define social networking as significant social influences (e.g, parents, friends, role model/mentor) that focuses on flows of resources and information.
- Lee and Tsang (2001) - Respondents were asked to rate their frequency of communication with their business contacts on a 5-likert scale, 'not at all' to 'daily'.
- West and Noel (2009) – Respondents were asked to state the individual who has provided important information or advice to them at the time they started their business. Then the respondents were asked to rate the communication frequency on 5-likert scale, from 'very infrequent' to very frequent'

Performance indicators (Q52, Q53, Q54):

- Kodithuwakku and Rosa (2002) – measured success based on number of employees, sales turnover, assets owned, social standing, annual income, and capital accumulated.
- Lee & Tsang (2001) – used growth rate (cumulative growth of sales in percentage) as a measure for venture performance, rather than profitability. This is because growth rate suitable for short run performance and is considered as a less sensitive matter to small business owner compare to profitability. Self-report data from respondents had better consistency and content validity.
- Baum and Locke (2004) – measured business performance based on percentage change in sales and percentage change in employment for the past 6 years of a venture growth.