

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

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***The Assessment of Human Resource Accounting Application
in Major Semi-Public Organizations in Gaza strip***

By

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"قَالُوا سُبْحَانَكَ لَا عِلْمَ لَنَا إِلَّا مَا عَلَّمْتَنَا إِنَّكَ أَنْتَ الْعَلِيمُ الْحَكِيمُ"

سورة البقرة. الآية (32)

Dedication

I dedicate this study to my mother, the oxygen of my life, whom without her never ending love, sacrifices, patience, and support, this study and my life could not have been possible

I dedicate this study to my father who loved me, encouraged me and supported me throughout all my life

I dedicate this study to my beloved life partner Ashraf

I dedicate this study to my grandparents and my aunt Saeda, for their limitless love and care for me

I dedicate this study to my beloved brother Ahmed and my sweet sisters

I dedicate this study to whom prayed for me and encouraged me to accomplish my study, my Mother in Law and Father in Law

and to all my friends and work colleagues

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Abstract

This research surveyed major semi public organizations in Gaza strip; the Coastal Municipalities Water Utility "CMWU", and Gaza Distribution Electricity Company "GEDCo", aiming to assess the Human Resources Accounting "HRA" application within those organizations through investigating the availability of some of the main HRA requirements that have been acknowledged by many previous studies which are (top management support, financial resources available, human resources information system, HR measures reliability, financial system used). The researcher has collected the research's primary data through a questionnaire that have been distributed on a sample consisted of one hundred and ninety four employee, and were analyzed using the analytical descriptive methodology approach to describe the basic features of the data in the research.

The most important findings of the research are the following:

- a) CMWU and GEDCo are aware that employees are their greatest assets and that they are the driving force behind the future success of any organization. Although in Palestine, the concept of human resource accounting is still very immature.
- b) The investigated organizations' management don't provide the employees with enough support to apply HRA in their organizations, because it is still a new concept and needs full commitment.
- c) The financial system used in the investigated organizations develops accurate reports and calculations, but needs more development to have the flexibility to adopt HRA.
- d) The investigated organizations have a very good HR database and information system that can provide an effective help to HRA application
- e) The available financial resources at CMWU and GEDCo cannot afford the cost of HRA application, because the system requires high cost.

The most important recommendations of the research are the following:

- a) CMWU and GEDCo need to improve the financial systems they use, and their HRIS.
- b) Management need more awareness campaigns about HRA, and its benefits.
- c) Training should be given to employees as a prior practice for applying HRA.
- d) Management should consider the investment of HRA and change the traditional look for them as expenses in the balance sheet.

ملخص

هدفت الدراسة إلى تقييم تطبيق محاسبة الموارد البشرية في كبرى المؤسسات شبه العامة في قطاع غزة، وهي مصلحة مياه بلديات الساحل وشركة غزة لتوزيع الكهرباء، وذلك عبر البحث في امكانية وجود أبرز متطلبات تطبيق نظام محاسبة الموارد البشرية التي تم الاشارة اليها في الدراسات السابقة، وهي (دعم الادارة العليا، الموارد المالية المتاحة، فاعلية قياس قيمة الموارد البشرية، نظام معلومات الموارد البشرية، النظام المحاسبي -المالي- المستخدم). لقد تم تجميع المعلومات الأولية لهذا البحث باستخدام استبانة تم توزيعها على عينة مكونة من مائة وأربعة وتسعون موظف، وتم الاعتماد على المنهج الوصفي التحليلي لوصف الملامح الأساسية للمعلومات الواردة في البحث.

وتمثلت أهم النتائج فيما يلي:

- أ) تدرك مصلحة مياه بلديات الساحل وشركة توزيع الكهرباء أن موظفيها هم أعظم أصولها قيمة وأنهم القوة الدافعة وراء نجاح أي مؤسسة، ولكن لا يزال مصطلح محاسبة الموارد البشرية حديثاً جداً في فلسطين.
- ب) ادارة مصلحة المياه وشركة توزيع الكهرباء لا تقوم بتزويد الموظفين بالدعم الكافي لتطبيق محاسبة الموارد البشرية، بسبب حداثة المصطلح والمجهود والالتزام الذي يتطلبه.
- ت) النظام المالي المستخدم يصدر تقارير وحسابات تتسم بالدقة، ولكنه يحتاج لمزيد من التطوير لتمنحه المرونة ما يسمح بتطبيق محاسبة الموارد البشرية.
- ث) يتوفر لدى مصلحة المياه وشركة توزيع الكهرباء قاعدة بيانات جيدة للموارد البشرية مما يدعم تطبيق محاسبة الموارد البشرية.
- ج) تطبيق محاسبة الموارد البشرية يستلزم موارد مالية ضخمة لتطبيقه مما قد يؤدي إلى تعسر الوضع المادي لمصلحة المياه وشركة توزيع الكهرباء.

أما أهم توصيات البحث فكانت:

- أ) ضرورة تطوير وتحسين النظام المحاسبي المستخدم وقاعدة بيانات الموارد البشرية في مصلحة المياه وشركة توزيع الكهرباء.
- ب) ضرورة زيادة حملات التوعية للادارة العليا بخصوص محاسبة الموارد البشرية وفوائدها.
- ت) الحرص على اعطاء الموظفين دورات تدريبية لتطبيق الموارد البشرية.
- ث) أن تبحث الادارة في امكانية النظر في الاستثمار في محاسبة الموارد البشرية وتغيير المنهج التقليدي الذي ينظر للموارد البشرية كنفقات.

Chapter One

The Research General Framework

1.1 Introduction

1.2 Problem Statement

1.3 Research Hypotheses

1.4 The Research Variables

1.5 The Research Purpose

1.6 The Research Importance

1.1.Introduction

The success and profitability of large organizations is increasingly depending on its Human Resources as described “most valuable asset” as Human Resources play an integral role in creating the uniqueness of the most successful firms through the current intensive competitive market, so researchers and firms became more concerned about developing methods to measure this “valuable asset”.

Human resource accounting (HRA) has been defined by the American Accounting Association as “The process of identifying and measuring data about human resource and communicating this information to interested parties” (AAA, 1973). Contrary to the dominant image of human resource accounting of “putting people on the balance sheet”. The aim of HRA has always been wider than this.

In fact HRA had three main roles; to provide organizations with objective information about the cost and value of human resources, to provide a framework to guide human resource decision making and to motivate decision makers to adopt a human resources perspective (Verma, Dewe, 2006, p.9).

Measurement of the investments in human resources will help to evaluate the charges in human resource investment over a period of time. The information generated by the analysis of investment in human resources has many applications for managerial purposes. The organizational and human performance can be evaluated with the help of such an analysis. It also helps in guiding the management to frame policies for human resource management. The present performance results will act as input for future planning and the present planning will have its impact on future results. The same relationship is also applicable to the areas of managerial applications in relation to the human resource planning and control. (Gupta, 2003)

Recently, there has been recognition that the focus within HRA needs to be on the value or worth of human resources rather than upon the cost of human resources. In addition, human resources need to be measured in terms of their strategic management potential, expressed through such concepts as human value management and human resource expense models (Verma, Dewe, 2006, p.14).

Human Resource Accounting "HRA" involves accounting for the company's management and employees as human capital that provides future benefits. In the HRA approach, expenditures related to human resources are reported as assets on the balance sheet as opposed to the traditional accounting approach which treats costs related to a company's human resources as expenses on the income statement that reduce profit. It also involves sophisticated calculations requiring all sorts of estimations, assumptions and variables that need to be factored in. HRA mainly focuses on the accounting of costs of acquiring personnel along with the programs adopted to enhance personnel efficiency. In doing so, efforts are made to stress the costs and benefits of personnel programs and contributions to the success of the organization (Alam, Kanti, 2010).

It is also useful to recognize that when managers go through the process of HRA measurement treating human resources as capital assets, they are more likely to make decisions that treat the company's employees as long-term investments of the company (Bullen, Novin, 2009). As HRA suggests that in addition to the measures themselves, the process of measurement has relevance in decision-making involving organizations (Bullen, Eyer, 2010. p. 3).

A well-developed system of human resource accounting could contribute significantly to internal decisions by management and external decisions by investors (Fajana, 2002).

In recent years, the financial reporting standards used in the United States, often referred to as Generally Accepted Accounting Principles (GAAP), have been moving toward adoption of more complex measurement methods compared with the traditional historical cost approach to asset measurement. The strong growth of International Financial Reporting Standards (IFRS) is another indication that the environment for financial accounting reporting is one that potentially encourages the consideration of alternative measurement and reporting standards. Accountants and others in the financial reporting environment have become accustomed to using more complex measurement approaches to the financial statement reported amounts. This would lend support to the possibility that future financial reports may include

nontraditional measurements such as the value of human resources using HRA methods (Bullen, Eyley, 2010, p.4).

This research strives to measure the available HRA requirements that are acknowledged and mentioned in previous studies by HRA specialists in the Coastal Municipalities Water Utility and Gaza Electricity Distribution Company, which are considered the main and major semi public organizations in Gaza strip regarding their size and their core business as Water and Electricity service provision.

Accordingly this research discusses HRA origins, importance, its managerial and financial implications, and investigates the HRA requirements availability in the mentioned organizations.

1.2. Problem Statement

There is a growing consensus that effective management of human capital is critical to an organization's success (Akhtar & Ding, 2008). This research focuses on the major requirements of HRA which is needed to be effectively applied in major semi-public organizations in Gaza Strip, in addition to clarifying the importance of HRA application, as there's a general ignorance of application of HRA, as employees are considered in the financial statements as expenses that reduce profits, while – in fact – they are important assets that are the main sources of this profit.

Consequently, the problem of this research can be formulated in the following statement **“Up to what extent do the HRA requirements available in major semi-public organizations in Gaza Strip?”**

1.3. Research Hypotheses

The following are the hypotheses of this research:

- a) There is statistical effect (at the 0.05 level) of management support on HRA Application.
- b) There is statistical effect (at the 0.05 level) of HR measures reliability on HRA application.
- c) There is statistical effect (at the 0.05 level) of financial resource available on HRA application.
- d) There is statistical effect (at the level 0.05 level) of the availability of Human Resources Information System “HRIS” on HRA application.

- e) There is statistical effect (at the level 0.05 level) of the Accounting system used on HRA application.
- f) There are significant differences (at the level 0.05 level) in the responses of the research sample due to the following socio-demographic variables (gender, education, age, experience, marital status, and employment period).

1.4. Research Variables

This research strives to reach its objectives and measure the HRA application through the following variables:

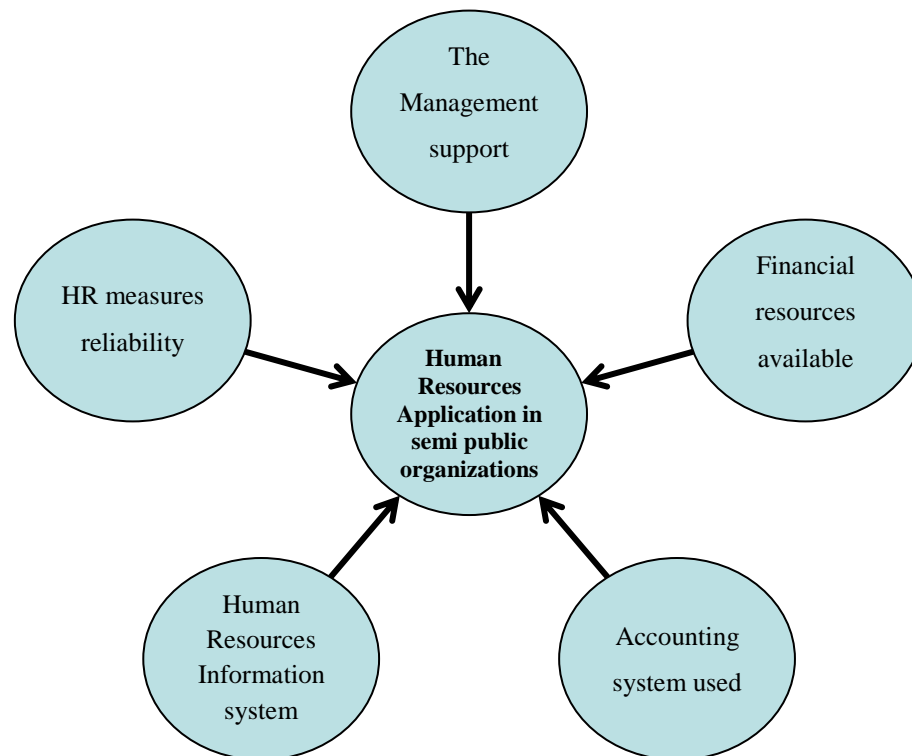
a) Dependent Variable

- (HRA Application in Gaza semi public organizations)

b) Independent Variables

- The Management support (Stovall, 2001).
- Human Resources measures reliability (Okpala and Chidi, 2010).
- Financial resources available (Rowbottom, 1998).
- Human Resources Information system (Verma, Dewe, 2004).
- Accounting system used (Lee, 2008).

Figure (1): Research Conceptual Model



Source: Articulated by the Researcher

1.5. Research Objectives

This research aims at:

- a) Investigating the extent of understanding HRA by the examined organizations.
- b) Investigating the available requirements of HRA within the examined organizations.
- c) Exploring the reasons and effects of applying or not applying HRA in the examined organizations.
- d) Facilitating applying HRA in the examined organizations after exploring the missing requirements within those organizations.
- e) Providing appropriate recommendations to create an effective model for measuring Human Resources Value.

1.6. Importance of the Research

This research highlights the importance of valuing Human Resources, which significantly effects the decision making process. Also its importance comes from:

- a) It is a first time study in Palestine discussing HRA in semi public organizations.
- b) Providing awareness to the examined organizations and other organizations about HRA and what it requires to be performed properly.
- c) Changing the traditional thought of human resources and put some guidelines for top management to apply HRA.
- d) Giving more focus on the importance of the employees generally as one of the most important and value adding assets in the organizations and highlighting valuing them which acts as employees' incentives.
- e) Enhancing ongoing research in the human resource accounting and therefore results in providing some recommendations for the application of HRA in the organizations under research, as a result, it can be useful to the management practitioners as well as the academicians through providing premium guidelines to other researchers on developing models for applying HRA.

Chapter Two

HRA Concepts and Application

2.1 Introduction

2.2 HRA Definition

2.3 Origins of HRA

2.4 Main Objectives and Purposes of HRA

2.5 Importance of Human Resource Accounting

2.6 Human Resources as Assets

2.7 Investment in Human Resources

2.8 HRA Requirements

2.9 The Treatment of HRA

2.10 Development of HRA Measurement Models

2.11 Importance of Developing Methods for Human Resources Measurement

2.12 Criticism on the HRA Methods

2.13 Traditional Approach Pitfalls Vs HRA

2.14 Effects of the Process of HRA Measurement in Decision-Making and Managerial Reporting

2.1 Introduction

Human resource management (HRM) can be defined as the activities and tasks that are useful in maximizing employees' performance in the organization, and that it is a dynamic and evolving practice used by leaders and managers throughout a firm to enhance productivity, quality, and effectiveness (Gilley et al, 2009, p.1).

While the essence of human resources management is the human being, the need to develop models and ways to measure this valuable and most effective resource has increased dramatically, with all the implications of productivity value, economic value and consumer value, as well as the need to recognize and maintain the human resources who add the most value to the organization has been developed and became a must, in order to develop the organization's human resources to be its competitive advantage (Zulief, 2003, p.20).

“Business has changed drastically since World War II, with service industries now dominating the U.S. economy. U.S. Department of Commerce statistics show that activity in "private services-producing industries" and intellectually based sectors of the economy contribute about two-thirds of the Gross Domestic Product to the United States. Increasingly, technology drives economic activity in both the service and manufacturing industries. In many industries, rapid technological growth and change happen routinely. The creation and maintenance of information contribute to the economy at an ever-increasing rate. Views of the modern business firm and its purpose in society also are changing rapidly. A recent national public opinion poll indicated that many people view corporations as socioeconomic entities with obligations to workers and communities, as well as to their shareholders. Contemporary financial reporting reflects none of these changes.” (Stovall, 2001, p.2).

So that puts focus on human resources as the most important asset that derives profit to the organizations because as mentioned the most dominating sectors of the economy are the service industry as well as intellectually based sectors.

Current accounting principles virtually treat all labor costs, including wages, benefits, recruiting, and training, as expenses. This treatment is similar to commodities such as materials or supplies, which doesn't suit the accounting for human resources as a valuable asset. And In an economy based on knowledge, people being knowledge-holders become the most valuable asset of an organization (Vatasoiu, et al, 2009).

There's a lot of increasing interest of human capital. The number of documents produced containing the term "human capital" increased from almost 700 in 1993 to over 8,000 in 2003. This growth coverage underscores the importance of human capital in the management of organizations. While the term human capital is commonplace in organizations, management's role in this important resource is often unclear. This lack of clarity leads to the mystery of human capital investment. Investment in this resource now commands much executive time and attention requiring a concerted pursuit for the optimum investment level. The concept of human capital is not new. It has been used by economists as far back as Adam Smith in the eighteenth century. Recently, economists who specialize in human capital theory have won Nobel Prizes; Gary Becker is perhaps the most well-known. Human capital theory explores the ways individuals and society derives economic benefits from investment in people. From an economist's point of view, human capital designates investments in improving competencies and skills. The management community has a broader view of human capital. For example, The Human Resources Glossary by William R. Tracey, published by St. Lucie Press, defines human capital as the return an organization gains from the loyalty, creativity, effort, accomplishments, and productivity of its employees. It equates to, and may actually exceed, the productive capacity of machine capital and investment in research and development. (Phillips, 2005)

2.2 HRA Definition

According to the Dictionary of economy Ed. Economics, Bucuresti, 1999, Resources are "all human, material, real and monetary elements that can be drawn and used in the production of economic goods to satisfy social needs"

Human capital refers to a set of knowledge and competence, skills and training, innovation and capabilities, attitudes and skills, learning ability and motivation of the people who form the organization. The concept of human resource accounting can be better understood if one goes through some of the important definitions given by the competent authors in the accounting field.

- a) The American Accounting Society Committee on Human Resource Accounting defines Human Resource Accounting as "the process of identifying and measuring data about human resources and communicating this information to interested

parties". In simple terms, it is an extension of the accounting principles of matching costs and revenues and of organizing data to communicate relevant information in financial terms. Human Resources Accounting, thus, not only involves measurement of all the costs/ investments associated with the recruitment, placement, training and development of employees, but also the quantification of the economic value of the people in an organization (**AAA, 1973**).

- b) Flamholtz defined human resource/capital accounting as accounting for people as an organizational resource. It involves measuring the costs incurred by organizations to recruit, select, hire, train and develop human assets. It also involves measuring the economic value of people to the organization (**Okpala, Chidi, 2010, p.66**).
- c) Mr. Woodruff Jr. Vice President of R. G. Batty Corporation defines Human Resource Accounting as "an attempt to identify and report investments made in human resources of an organization that are presently not accounted for in conventional accounting practice. Basically it is an information system that tells the management what changes over time are occurring to the human resources of the business".
- d) M.N. Baker defines Human Resource Accounting as "the term applied by the accountancy profession to quantify the cost and value of employees to their employing organization". Thus, human resources accounting may be defined as "a process of accounting which identifies, quantifies and measures human resources for the use of management to cope up with the changes in its quantum and quality so that equilibrium could be achieved in between the required resources and the provided human resources" (**Johanson, et al, 1998**).

In short, human resource accounting is the art of valuing, recording and presenting systematically the worth of human resources in the books of account of an organization. This definition brings out the following important characteristic features of human resource accounting:

- Valuation of human resources
- Recording the valuation in the books of account
- Disclosure of the information in the financial statements of the business.

Also some considers Human Resources as part of the intangible assets that are defined as either 'assets' or 'skills'. Assets include the intellectual property rights of patents,

trademarks, copyright and registered designs, as well as contracts, trade secrets and databases. Intangible resources, which are skills or competencies, include the expertise of employees, suppliers, distributors and the culture of the organization, enabling it to cope with change, put the customer first, etc. In addition to being categorized as assets or skills, intangible resources may be categorized as being people dependent and people independent (Hall, 1992).

“Lowendahl and Haanes provide definitions on a number of intangibles for the purpose of strategic management of professional service firms. Because there is no consensus on the definition of ‘resources’, Itami suggests that resources consist of (a) physical, human and monetary resources that are needed for business operations to take place and (b) information-based resources, such as management skills, technology, consumer information, brand name, reputation and corporate culture. After further elaboration on the concepts of intangible resources, intangible assets, capabilities and competencies, Haanes & Lowendahl categorise intangible resources into competence and relational resources. By the latter is meant reputation, client loyalty, etc., which are conceived as being fundamental to the performance of the firm. Competence is defined as the ability to perform a given task and exists at both the individual and organisational level. On the individual level, it includes knowledge, skills and aptitudes; on the organisational level, it includes client specific databases, technology, routines, methods, procedures and organisational culture” (Johanson, et al, 1998).

2.3 Origins of HRA

Early interest in HRA came from several sources, such as the economic theory of human capital, the new human resource perspective, a concern for human assets as components of corporate goodwill, and from early organizational psychologists, as early stages in the development of HRA were characterized by a period of basic academic research to develop and assess the validity of models, both cost and value, monetary and nonmonetary, for the measurement of human resource cost and value. The HRA origins have been traced back to before 1865 during the American Antebellum period (Nash & Flesher, 2005).

Scott & Paton, early accounting theorists called for treating people as assets and accounting for their value. As Likert and Odiorne studied leadership effectiveness and a new human resource perspective based on the premise that people were valuable organizational resources and therefore ought to be managed as such, and Likert focused on the economic value of human capital and the human organization as a whole (Alam, Kanti, 2010).

In 1968 Brummet, Flamholtz & Pyle used the term “human resource accounting” for the first time. Flamholtz’s Ph.D. dissertation, “The Theory and Measurement of an Individual’s Value to an Organization,” an exploratory research which formulated a theory of an individual’s value to an organization and how it could be measured through HRA. Flamholtz has defined HRA as “the measurement and reporting of the cost and value of people in organizational resources”. According to Sackmann et al. and regarding HRA definition by AAA, HRA not only involves measurement of all the costs/investments associated with the recruitment, placement, training and development of employees, but also It provides information about human resource costs and values, serves to facilitate to decision making, and motivates decision makers to adopt a human resource perspective (Alam, Kanti, 2010).

According to Flamholtz, the challenge of recognizing and measurement of valuable human assets led in 1960s to the development of HRA field in the accounting literature. It first started with a period of basic academic research to develop and assess the validity of models, both cost and value, monetary and nonmonetary, for the measurement of human resource cost and value, in order to formulate HRA uses as a tool for different parties who can get the maximum benefit of it. The research studies showed that HRA had an impact on both external and internal decision-making. As It is mentioned that through looking at different proposals, the resource theory considers human resources in a more explicit way. This theory considers that the competitive position of a firm depends on its specific and not duplicated assets. The most specific (and not duplicated) asset that an enterprise has is its personnel. It takes advantage of their interdependent knowledge. That would explain why some firms are more productive than others. With the same technology, a solid human resource team makes all the difference (Archel, 1995).

The characteristics of Human Resources Accounting (Vatasoiu, Comescu, et al, 2009):

a) It’s a system of accounting in which identification of human resources is made.

- b) Investment made in human resources is recorded.
- c) Measurement of costs and values are made.
- d) Changes occurring in human resources over a period of time are also recorded.
- e) Communicates information through financial statements to interested parties.

Ripoll and Labatu state that there are two reasons for including human resources in accounting. First, people are a valuable resource to a firm so long as they perform services that can be quantified. Second, the value of a person as a resource depends on how he is employed. So management style will also influence the human resource value (Alam, Kanti, 2010).

This requires an understanding top management that appreciates the important role that human resources play in the organization, so that top management could provide support to the process of HRA.

The earlier HRA studies emphasized the need for future research in the field, and a number of researchers continued or began work in the area. As noted in Sackmann, Flamholtz, Bullen and Hua, and throughout the ensuing years many studies were conducted in the area of HRA. Some of the most interesting research recognized significance to organizations of the process HRA measures, as well as the measurements themselves. (Flamholtz, Narasimhan, et al, 2004).

2.4 Main Objectives and Purposes of HRA:

The following summarize the most important objectives and purposes of HRA:

- a) It provides companies with information about the cost and value of its human resources.
- b) It provides companies with a guide for human resource decisions about acquiring, allocating, developing, and maintaining human resources in order to attain cost-effectiveness.
- c) It motivates managers and decision makers to look at decisions through a human resource point of view (Toulson & Dewe, 2004).
- d) It allows management personnel to monitor effectively the use of human resources.
- e) It provides a sound and effective basis of human asset control, that is, whether the asset is appreciated, depleted or conserved;

- f) It helps in the development of management principles by classifying the financial consequences of various practices (Sharma & Shukla, 2010).

2.5 Importance of Human Resource Accounting

Human Resource Accounting provides useful information to the management, financial analysts and employees as stated below (Innes, Kouhy, et al, 2009):

- a) Human Resource Accounting helps the management in the Employment, locating and utilization of human resources.
- b) It provides a basis for planning of physical assets vis-à-vis human resources.
- c) It assists in evaluating the expenditure incurred for imparting further education and training in employees in terms of the benefits derived by the firm.
- d) It helps to identify the causes of high labour turnover at various levels and taking preventive measures to contain it.
- e) It helps in locating the real cause for low return on investment, like improper or under-utilization of physical assets or human resource or both.
- f) It helps in understanding and assessing the inner strength of an organization and helps the management to steer the company well through most adverse and unfavourable circumstances.
- g) It provides valuable information for persons interested in making long term investment in the firm.
- h) It helps employees in improving their performance and bargaining power. It makes each of them understand his contribution towards the betterment of the firm vis-à-vis the expenditure incurred by the firm on him.

2.6 Human Resources as Assets

There is debate as to whether human resources are an asset and should be included in financial statements. Employees do not fit into the classical definition of an asset as something owned by a firm. Assets can also be defined as having utility, scarcity, and exchangeability. Because humans are not exchangeable, they do not fit into this definition. If assets are defined by tangibles or intangibles that have specific characteristics whose usefulness or value is shown on the financial statements, then humans can be assets. By this definition, an asset is something that is obtained for the added value it provides to a company. Ebersberger stated that once human resources

are recognized as an asset, the biggest challenge is determining the value of the asset (Yakhou & Lilly, 2005).

2.7 Investment in Human Resources

HRA system consists of two aspects namely:

- a) The investment made in human resources.
- b) The value of human resources.

Measurement of the investments in human resources will help to evaluate the charges in human resource investment over a period of time. The information generated by the analysis of investment in human resources has many applications for managerial purposes.

The organizational and human performance can be evaluated with the help of such an analysis. It also helps in guiding the management to frame policies for human resource management. The present performance results will act as input for future planning and the present planning will have its impact on future results. The same relationship is also applicable to the areas of managerial applications in relation to the human resource planning and control. (Babu, Ul Haq, Mohan, 2010)

2.7.1 Investment Pattern in Human Resources

The human resource investment usually consists of the following items:

- a) Expenditure on advertisement for recruitment.
- b) Cost of selection
- c) Training cost
- d) On the job training cost
- e) Subsistence allowance
- f) Contribution to provident Fund
- g) Educational tour expenses
- h) Medical expenses
- i) Ex-gratia payments
- j) Employee's Welfare Fund.

All these items influence directly or indirectly the human resources and the productivity of the organization.

After analyzing the investment pattern in the human resources of an organization the current cost of human resources can be ascertained. For this purpose, current cost is

defined as the cost incurred with which the organization derives benefit of current nature. These are the costs which have little bearing on future costs. Thus the expenses incurred for the maintenance of human resources are termed as current costs. Current costs consist of salary and wages, Dearness allowance, overtime wages, bonus, house rent allowance, special pay and personal pay. **(Babu, Ul Haq, Mohan, 2010).**

2.7.2 Training Costs as Investments

It was indicated that too many business leaders have no generally accepted definition or accounting procedure for tracking training investments, and that a lower training investment is not automatically better for an overall return on investment **(Davidove & Schroeder, 1992).**

It has been suggested that although many business leaders still view training as an overhead expense, with thorough ROI evaluations, training departments can convince business to view them as partners in creating the assets crucial to organizational success. Other authors have expressed similar views suggesting the benefits of HRA measurements and the process of measuring human resources. For example Johanson and Mabon indicate that expressing human resource interventions in financial terms and /or cost benefit terms is more effective than using soft accounting information such as data on job satisfaction. Because the classical function of accounting is the determination of the value of the economic activity, performing analysis with hard numbers such as cost-benefit analyses helps us determine how resources should be used by human resources for various interventions **(Dewe, 2004).**

2.8 HRA Requirements

In order to apply HRA effectively in an organization, some resources and aspects must exist such as:

- a) Management support from all levels, in order to facilitate the process.
- b) Time and both financial and human resources are needed for data collection, setting criteria, monitoring employees and going on in the process of HR valuing.
- c) Multi functional team to work around in the process, as it needs variety of skills and way of thinking, and the process of measuring HR value is complicated.
- d) Modern style HR team that embrace new changes and help other adapt with it.

- e) Awareness campaigns from HR team to all employees about the valuation and to understand that they aren't going to be treated as objects, instead it's for their own sake.
- f) Development of knowledge based Methodologies for measuring.
- g) Measurements must be designed to be highly relevant to the strategic direction of the company (Verma & Dewe, 2004).
- h) The Company's size should be large, because it is not economical for small firms to apply it as it involves heavy costs (Narayan, 2010).
- i) Human resources information system should be developed that contains all personnel data, to be used in proper personnel administration (Pehkonen, 2000).

2.9 The Treatment of HRA

According to Barcons and Al, Human Resources Accounting can be treated from two perspectives (Vatasoiu, et al, 2009):

- a) Treatment from a Financial Accounting Perspective: As long as future benefits are expected to come from these training costs, they can be treated as assets. However, this does not hold true in reality. As Cea García states: "There is a clear absence of correspondence between the real assets in the present firms and those recognized in the balance sheet. In fact, assets are too related to its juridical conception (that is, owned by the firm...), in front of a pure economic approach where asset is every instrument or way that can be used in the production-distribution firm's process or, in general, every category of economic value which can be transformed into goods or service or any instrument at the service of the firm or that the firm uses, regardless of its juridical state...and also all those goods and rights that the firm does not own now but used to own or will own later on, by virtue of collateral contracts or agreements which may induce it."

So, a diagnosis is reached about the predominant asset concept. This situation can be explained by two important problems that are met when referring to intangibles, which are identifying the assets cost and estimating the period in which the asset should be amortized. It can be said then that not only are the limits unclear between intangible, fixed assets and deferred charges, but also which elements are considered assets and which elements are considered expenses.

b) Treatment from a Managerial Accounting Perspective: Personnel working for a determined enterprise are actually participating in a value-creation process. That is, any economic activity makes the firm incur costs. One traditional classification takes into account the cost categories of raw materials, industrial plants, and personnel. When adding income flow to an organization's market goods and services, if it is superior to the cost flow, it becomes added value. This value is a consequence of the interaction between material and human resources in production. Because it is difficult to know and measure value, accounting has used substituted measures such as acquisition cost, substitution cost, and even opportunity cost.

2.10 Development of HRA Measurement Models

Research during the early stages involved the continued development of concepts and models for measuring and accounting for human resource cost and value. According to Flamholtz's model for measurement of original human resource, human resource costs may be explained in terms of the two major categories of acquisition costs and learning costs. Acquisition costs include the direct costs of recruitment, selection, hiring and placement, and the indirect costs of promotion or hiring from within the firm. Learning costs include the direct costs of formal training and orientation and on-the-job training. In a human resource accounting system, these costs are reported in asset accounts with future economic benefits rather than as expenses costs (**Flamholtz, 1999, p. 59**).

There are many different methods of HRA. The different methods should be used depending on the purpose of the information and who will be the user of the information (**Yakhou & Lilly, 2005**).

The key challenge of human capital accounting is the best way to value human capital. Various methods for accounting for human resources have emerged, used at measuring, developing and managing the human capital in an enterprise. None of these methods however is generally accepted. There are different approaches used as a basis for determining the monetary value of human resources, Each approach uses different types of methods to determine the value an employee has to a company (**Dawson, 1994**):

- a) Present Value model: In his present value method, Flamholtz suggests that people should be valued at the present value of expected future services to be rendered to the organization. Thus, Flamholtz defines individual's value to organization as the present worth of the set of future services the person is expected to provide during the period he/she is anticipated to remain in the organization (**Dawson, 1994**).
- b) Original Cost model: Brumment suggests that costs of training and development which are parts of original costs should be capitalized. His argument is that training and development are expected to have ongoing benefits to the employee and to the organization and as such would provide future benefits over years. On the other hand, he suggests that other costs associated with recruitment should be expensed as the period costs. The original cost method has been implemented by few companies like R. G. Barry. Others include Atlanta Braves, Flying Tigers Corp., Upjohn Co., and Touche Ross & Co. (**Paperman, 1977**).
- c) Historic cost model: The historic cost method is one of the more popular methods because of its similarities to normal accounting procedures, it calculates an employee's worth using the total historic costs associated with obtaining an employee. This method requires accruing the cost of the investment in the employee. One of the problems with this method is that decisions must be made about what costs to expense and what costs to capitalize. One way of deciding what to expense or capitalize is to classify human resource costs as either training or educational.

With this approach, training cost would include anything associated with the current job, and it would be expensed. Educational costs would be anything associated to the preparation or advancement, and these costs would be capitalized. Another approach that could be used includes all the costs of recruiting, testing, training, and development. The decision of whether to capitalize or expense is based on how long the cost will benefit the company. If the cost will lead to a benefit for longer than twelve months, then the cost will be capitalized.

Ebersberger notes that it is important with this method that the users of the information do not view it incorrectly. Historic costs do not represent the worth of an employee; they are merely an assessment of past costs. Instead, the benefits

from historic cost allow rate of return on investments and turnover costs to be computed. There are also other problems with the historic cost method. One problem is that anything that an employee learns outside the job will not be included in the costs. Another limitation is that employees may apply training at different levels. Due to the inability of historic cost to aid in making decisions concerning the present and future, some prefer to use the replacement cost approach (**Dawson, 1994**).

- d) Replacement Cost model: Replacement cost method by Likert suggests that the cost of employee should be valued based on what the organization would have to sacrifice to replace an employee if he/she leaves the organization. In essence, this “includes the cost attributable to the turnover of a present employee, as well as the costs of acquiring and developing a replacement.” It calculates an employee’s worth using the replacement costs associated with obtaining an employee. Replacement costs can be defined as the costs that would be encountered today to replace current human resources. Replacement costs include three types of costs. Ebersberger added that they include the cost of hiring new employees for existing jobs, the cost of training new employees to the proper level, and the cost of moving employees to new positions or out of the company. One benefit of this model is that it is based on solid facts: the costs of recruiting and training. One problem with replacement cost approach is that does not take into account the work ethics of employees. Replacement costs are based on the current value of an employee to a company. This value is the present value of the future services that an employee is expected to provide (**Dawson, 1994**).
- e) Total Organizational model: Dawson suggests that the total organizational model takes the value of the company as a whole and divides it between the different inputs to the company, and then it divides the amount associated with labor between the different clusters of employees in the company (**Dawson, 1994**).
- f) A Bidding model: In the bidding model, the managers in an organization determine the value by bidding for the human resources that are in the organization. This approach suggests competitive bidding for scarce employees in an organisation i.e. opportunity cost of employees linked to scarcity. The approach

proposes the capitalising of additional earning potential of each human resource within the company (**Dawson, 1994**).

- g) Economic Cost model: The economic cost model comes from the human capital theories. Economic value refers to the appropriately discounted amount of net cash inflows generated by the human resources of a firm over their economic service lives. Some authors refer to the economic value method as the present value measuring technique or use the term in conjunction with the opportunity cost approach (**Dawson, 1994**).
- h) Stochastic Reward Valuation model: The last approach is the most complex. It is the stochastic rewards valuation models. This approach focuses on HRA value rather than HRA cost, it calculates the value of an employee “as the discounted sum of the values of the ‘service states’ that the individual will occupy during his/her career with the organization” (**Tang, 2005**).

The stochastic rewards valuation model requires five different pieces of information (**Dawson, 1994**):

- The mutually exclusive service states that the individual may occupy within the organizational system;
- The value of each of these service states to the organization;
- The estimated tenure of the person in the organization;
- The probability that the individual will occupy each service state at specified future times;
- The discount rate to be applied to future cash flows to determine their present value.

Some of this information may be difficult to determine, such as the value of the service states. Dawson stated that the creator of this model, Flamholtz, recommends using his “price quantity method” or “income method” to determine the values of the service states. Flamholtz’s “price quantity method” requires determining what the “product of the price per unit of human services and the quantity of the services.” The “income method” of Flamholtz requires predicting the “expected earnings of a firm and allocating them between human and other resources and further allocating them among specified people.” Flamholtz admits

that some of these measures may be hard to determine and that in certain situations “surrogate measures” should be used (Yakhou & Lilly, 2005).

Both the inclusion of HRA measures and the actual process of measuring these HRA measures in managerial decisions have implications for organizations in building sustainability. HRA involvement in the organization provides information that facilitates human resource investment with other investment proposals for the firm’s resources, and demonstrates that the long-term benefits from such investments can be positive. Companies that invest in their human resources are at an advantage in building a sustainable transformation (Bullen, & Novin, 2009).

2.11 Importance of Developing Methods for Human Resources Measurement

A survey research was conducted in utilizing component analysis and two reasons were found why measuring human resources is important (Dewe, 2004):

- a) The first is that measurement reflects the strategic and competitive importance of human resources, and
- b) The second suggests that to earn credibility, human resources must be expressed in financial terms

If properly implemented, the human capital planning and budgeting process will become a key driver of strategy as strategic human capital planning and budgeting ensures that the best resources are mobilized for each internal process, too often organizations focus 100% on meeting the financial budget first without consideration of the effect the cost slashing will have on strategy, and note that the financial numbers are a lagging indicator of where a firm has been and should not be substituted for leading indicators of where the firm is going. Rather management should focus clearly on causal, leading indicators that drive successful financial measures, and that it is through skills-based budgeting that the fallacy of financial focus can be avoided (McKenzie and Melling, 2001).

The value of human capital should be more fully considered when making decisions about the acquisition and disposal of people—and notes that the accounting practices currently employed by companies can have an undue influence in driving the strategic decisions of these companies. Moore notes that there are parallels between the process

of acquiring an employee (a human capital asset) and that of acquiring a fixed capital asset. (Bullen, M.L., 2007, p.85-103).

2.12 Criticism on HRA methods

As of now, there are no data available to compare the validity of the accounting methods. Of all these methods, no single approach satisfies all organizational and professional interests. Firms engaging in the production of goods are different from those providing services and it may not be feasible to use the same Human Capital Accounting methods for them. For example, in an auditing firm a member of staff may be measured by the number of bills he/she generates in a month, while in a manufacturing industry, an employee cannot be directly associated with finished product, because such products passes through several hands and units. There is also the fear that Human Capital Accounting may be used by management to manipulate financial statements. With the collapse of Enron, WorldCom and many others, due to the so- called creative accounting, many are of the view that Human Capital Accounting will give avenue to management to manipulate financial statements. Assigning value to employees could become very low motivator for some employees that thinks highly of their jobs than the value assigned by management. Some also criticize strongly the documentation of people as book assets. Their argument is that it presents employees as property of an organization. Evaluation in Human Resource Accounting requires a lot of estimations of data which is susceptible to manipulation. Management could manipulate figures to suit its interest. Different countries have different requirements and that creates barrier for uniform method (Gebauer, 2003). For instance, United States Generally Accepted Accounting Policies {GAAP} stipulates financial reporting guidelines which are different from those of Indians and to some extent Nigerians. All these challenges and criticisms hinder the progress of Human Resource Accounting (Okpala & Chidi, 2010, p.71)

So management need to be fully focused when applying HRA, and to consult HRA specialist to coordinate the whole process and design the suitable model for HRA measurement in the organization, also a follow up staff should continue the process and provide a proper auditing to avoid manipulation.

2.13 Traditional Approach Pitfalls Vs HRA

The pitfalls of layoff decisions made based solely on traditional financial accounting measures which treat employees as expenses. It is noted that whereas some downsizing of U.S. firms is justified, some companies have gone too far, and that the culprit is overemphasis on traditional financial statement effects. Because financial accounting emphasizes the good side of layoffs and ignores the bad side of human asset depletion, it is easy to see how companies can be led astray when they focus primarily on the traditional financial statements effects of their decisions.

The words “downsizing” and “rightsizing” became popular business jargon during the 1991-1992 recessions, and given the uncertain financial climate, many companies have again looked toward downsizing (**Wilson, 2001**).

However Wilson notes that paring back on the workforce may not be the best solution since “Downsizing is much like radical surgery—the patient may survive, but is in a weakened state,” and that downsizing may result in more problems than it solves because it puts the organization’s survivors on overload and often doing work for which they were not trained, stressed, and burned out sometimes even to the point of leaving, and often resulting in decline of morale which may adversely affect the bottom line. Wilson suggests taking a more strategic approach using the fundamental business performance measure of return on investment—but including employee costs such as salary, benefits, training, payroll taxes and share of administrative costs as investments in the Return on Investment (ROI) calculation. In evaluating management and employee educational and training programs, management’s involvement in a measurement process which analyzes these outlays as investments in human resources will likely result in management taking a longer-term approach. This will benefit the company, as opposed to a short-term cost-cutting approach to boost short-term profits at the expense of long-run productivity and competitiveness. The HRA measure was utilized of expected realizable value, and it was found that employees’ participation in a management development program increased the value of the individuals to the firm. In addition it was noted that the HRA measures provided upper level management with an alternative accounting system to measure the cost and value of people to an organization. Thus HRA represented either a paradigm or way of viewing human resource decisions, and the set of measures for quantifying the effects

of human resource management strategies upon the cost and value of people as organizational resources (Flamholtz, et al, 2003).

2.14 Effects of the Process of HRA Measurement in Decision-Making and Managerial Reporting

Managers are more likely to make decisions that treat the company's employees as long-term investments of the company when they go through the process of HRA measurement treating human resources as capital assets. "Flamholtz describes the HRA paradigm in terms of the "psycho-technical systems" (PTS) approach to organizational measurement.

According to the PTS approach, there are two functions of measurement:

- a) Process functions in the process of measurement and;
- b) Numerical information from the numbers themselves.

Whereas one role of HRA is to provide numerical measures, an even more important role is the measurement process itself. The HRA measurement process as a dual function attempts to increase recognition that human capital is paramount to the organization's short and long-term productivity and growth. When managers go through the process of measuring human resources, they are more likely to focus on the human side of the organization and are more likely to consider human resources as valuable organizational resources who should be managed as such" (Bullen, 2007).

For example, management is better likely to see the hidden costs to the company's human resources and the long-term implications to the human assets, when dealing with potential layoff decision with the use of HRA measures in addition to traditional accounting measures. This is because HRA views human resources as assets or investments which must be maintained for long-run productivity. Layoffs may affect future long-term flows profits from lost productivity, costs of rehiring and retraining when business returns, and costs of lower morale of existing workforce. If management quantified the actually costs of layoffs, management might be less inclined to use layoffs as a way to cut costs and boost short-term profits at the expense of long-run productivity and profits (Bullen, Eyer, 2010, p.5).

The best use of HRA as mentioned earlier may be as a managerial tool to aid in making decisions that will benefit the long-run strategic goals and profitability of the

company. As opposed to external financial reporting, managerial reporting does not require adherence to a strict set of GAAP in specific financial statements in acceptable format reported to the public. However even if human assets are not reported on the face of external financial statements, HRA can play a crucial role in internal managerial decision-making, and HRA measures can be used to show that investments in a company's human resources may result in long-term profit for the company.

In the early 1980s, the U.S. Office of Naval Research (ONR) sponsored a research project dealing with the feasibility of the application of HRA to naval human resource management issues. The resulting research, conducted by Dr. Eric Flamholtz and reported in Flamholtz and Flamholtz and Geis involved the development and application of a model for measuring the personnel replacement costs of industrial engineers (the civilian sector) in the U.S. Navy. This project was one of the first of significant scope by a major institution in either the public or private sector (**Bullen, 2007, p. 89**).

Chapter Three

Previous Studies

3.1 Introduction

3.2 Arabic Studies

3.3 Foreign Studies

3.4 General Commentary on Reviewed Studies

3.1 Introduction

A number of studies and articles published in different journals that discussed HRA with its various aspects and its application and effects were reviewed and cited within this research. However, there was a clear shortage in the Arabic studies that discuss this topic, as it hasn't been highlighted in the Arab countries compared by foreign ones, so this research depends mainly on the foreign studies; it reviews twenty two foreign studies and articles, in addition to three Arabic studies, sorted according to date from the newest to the oldest.

The following studies have direct relationship to this research, matching its purpose and objectives, and they helped in setting its dimensions taking into consideration its local application and cultural differences.

3.2 Arabic Studies

3.2.1 Shuaib (2009): “Analysts of Human Resource Accounting”.

The objectives of this paper is to investigate the nature of human resource accounting, the proper accounting methods for treatment of the human resources in the financial reports, and examine the consistency of human asset accounting with generally accepted accounting principles. The paper also discusses the different valuation models applicable to human assets in Kuwait.

Research Results:

- a) The accounting professions need to find ways to absorb the skills of other disciplines to broaden the competence and find solution to the problem of human resource.
- b) There is no reason why the human resource information cannot be included as a supplementary or schedules notes in financial reports.
- c) None of the known HRA methods could possible provide information consistent with the principles of objectivity, reliability, conservation, and uniformity.

Research Recommendations:

- a) The potential usefulness of human asset accounting needs further research.

- b) The examination of the nature of Human Resources Accounting and the measurement methods suggest that this subject must be given serious consideration and analysis.

3.2.2 Jaber (2007): "Designing Human Resources Accounting Information System in Economic Units".

The research aims at showing the importance of Human Resources as an information system in economic units that can help in organizing the data of those resources so that it can be used in more effective decision making regarding human resources, especially if the full integration has been accomplished between human resources management information system and human resources accounting information system in these units. The research was conducted at the Arab Academy in Denmark discussing HRA in Arab countries.

Research Results:

- a) The need for human resources accounting information system in economic units increases as long as there are a lot of economic operations that demand high training and efficiency skills.
- b) Designing HRA information system will contribute in measuring human resources value and analyzing it financially in addition to planning it on economic units.
- c) The human resources accounting information system is one of the subsystems within the system of accounting information system that is concerned to provide all historical, current and future financial and non-financial human resources data.
- d) Applying information technology has an important effect on HRA information system, and its inputs are the HR management information system outputs.

Research Recommendations:

- e) Human resource expenditures should be accounted in separated independent accounts that can be accurately measured, and it then can contribute in those resources decision making more effectively.
- f) Arabian Internet network specialized in HR should be constructed in order to interact and exchange experiences n Arab countries.

- g) Training officers should measure the training effect on the trainees' performance and the economic unit, by using modern techniques for reconciliation after training, in addition to variation in training methods.

3.2.3 Sate' (2004): "Human Resources Accounting".

This research discusses the importance of HRA and measurement of human capital, in addition to that it shows its practical application on industrial firm in Syria, that is specialized in women clothes, to show its effect on financial statements.

Research Results:

- a) The standards of recognizing a resource as an asset is fulfilled and can be applied on human resources.
- b) There are many methods by which human resources can be measured and shown on the financial statements.
- c) Recognizing human resources as an asset in financial statements of the project increases the credibility of project results and accomplishments.
- d) Some solutions were developed to overcome the problems in applying human resource accounting. (such as work turnover).

Research Recommendations:

- a) More realistic and easier methods should be developed to measure human resources cost.
- b) All organizations are recommended to apply HRA for its benefits in showing more realistic and logical financial statements.
- c) Organizations should develop accounting and control standards to continuously measure human resources value and cost.

3.3 Foreign Studies

3.3.1 Mir & Singh (2011): "Human Resource Accounting (HRA) - A Conceptual Framework and International Developments"

The article focuses on the historical developments of HRA and its stages, it also shows its development many countries such as (Scandinavia, Australia and New Zealand, United Kingdom, China, India, Portugal, Germany, Canada, and Greece),

and it also discusses Human Resource Accounting in Managerial Reporting and Decision Making.

Research Results:

- a) The International Accounting Standards Committee (IASC) recently published standard on Intangible Assets and comments on reports that investment and awareness of the importance of intangible assets have increased significantly in the last two decades.
- b) HRA valuation was important for decision-making in order to achieve the organization's objectives and improve output.
- c) Human resource managers appreciate the positive effect of overseas assignments on personal development, but often underestimate the long-term benefits of an international assignment for the company.
- d) The HRA measures provided upper level management with an alternative accounting system to measure the cost and value of people to an organization.

Research Recommendations:

- a) The author suggested measure of learning cost, cost of lost productivity, and cost of job vacancy and discusses the usefulness of the HRRC model in decision-making in such areas as employee turnover, separation indemnity, duration of labor contracts, and personnel budgets in monetary terms.
- b) Rapid decision is supported backed by quantifiable, accurate information and defensible forecasts.
- c) Although many business leaders still view training as an overhead expense, with thorough ROI evaluations training departments can convince business to view them as partners in creating the assets crucial to organizational success.

3.3.2 Okpala & Chidi (2010): "Human Capital Accounting and its Relevance to Stock Investment Decisions in Nigeria"

This research set out to investigate the relevance of human capital accounting to stock investment decisions in Nigeria as well as the desirability of the inclusion of human capital accounting in financial reporting. This research x-rayed the relevance of human capital accounting to stock investment decisions in Nigeria. It is believed that

a well-developed system of human resource/capital accounting could contribute significantly to internal decisions by management and external decisions by investors. Information on investment and value of human resources is useful for decision making in the enterprise. The authors adopted the survey research design.

Research Results:

- a) Human capital accounting is highly significant to investors in making relevant investment decisions and that the inclusion of human capital accounting in financial reporting is desirable to aid investors in making rational decisions.
- b) Human capital accounting should be made necessary element of financial reporting to help investors make more rational investment decisions.
- c) The quality of human capital is a major factor in determining the value of a firm's stock and investment decisions.
- d) The inclusion of human capital value in the balance sheet of organizations does help investors make more rational investment decisions.

Research Recommendations:

- a) The need to address the issues of human capital development and investment at both the micro and macro levels.
- b) Human capital value should be included in the balance sheet of Nigerian organizations to aid investment decisions.

3.3.3 Inyang (2010): "Strategic Human Resource Management (SHRM): A Paradigm Shift for Achieving Sustained Competitive Advantage in Organization".

This paper discusses the emergence of SHRM as a paradigm shift and the pertinent issues raised or implied in this transition in Nigeria. It further presents the resource-based view (RBV) of integrating SHRM with business strategy. It shows SHRM as a more systematic approach, which extends beyond the management of human capital and people – management activity to involve the integration of human factors to strategic business goals of the organization.

Research Results:

- a) The traditional HRM practices concerned with the management of people in an organization, have contributed significantly to organization bottom line.

- b) HRM offers traditional and administrative support services in the organization, in terms of staffing, training and development, compensation and benefits.
- c) The emergence of SHRM generated more value-added core responsibility, and emphasized the need to integrate HR practices with business strategy.
- d) SHRM strongly believes that critical organizational capabilities or performance behaviors are necessary for the attainment of a particular business strategy or goal and to add value to the organizations.

Research Recommendations:

- a) The HR practices must be properly aligned with the strategic goals of the organization.
- b) The HR practitioner must possess the requisite strategic skills and core competencies to function as a strategic business partner and a change agent, and to successfully handle the emerging challenges of SHRM.
- c) The HR professional operating under the SHRM system must chart roles that include early and active involvement in key strategic business choices.

3.3.4 Narayan (2010): “Human resource accounting: A new paradigm in the era of globalization”.

In this paper the author has elaborately discussed about the objectives and process of HRA in India (the Indian context). The basic objective of the paper is to research the Human Resources Accounting practices, to identify the issues and challenges, to examine these issues and challenges and lastly, to give suggestions based on the findings of the research.

Research Results:

- a) This is an era of globalization and cost cuts, therefore, HRA would give an organization a correct vision towards the way forward.
- b) The concept of HRA has been appreciated by the accounting profession and its usefulness has also been acclaimed in the literature but unfortunately, its application has not flourished throughout the world.
- c) The International Accounting Standards Board (IASB), and the Accounting Standards Board (ASB) have not been able to formulate any specific accounting

standards on measurement and reporting of cost and value of HR of an organization.

- d) The physical assets can be owned and traded by an organization but the human assets cannot and can be only utilized in this regard. The physical assets have some realizable value of retirement but the human resources do not have any such value.
- e) Traditional financial statements are less illuminating with respect to the assets that create wealth than they were in the past.

Research Recommendations:

- a) Considering the paramount importance of HRA, proper initiation should be taken by the Government as well as Professional Boards at the National and International levels in respect of formulation of specific accounting standard and suitable valuation models on the measurement and reporting of the value of HR.
- b) Measuring of intellectual capital should be used as it helps managers and investors by providing a more accurate estimate of true value of the company than would a single accounting of its physical holdings.

3.3.5 Bullen & Eyer (2010): “Human resource accounting and international developments: implications for measurement of human capital”.

This article aims at clarifying the Human Resource Accounting (HRA) involves accounting for expenditures related to human resources as assets as opposed to traditional accounting which treats these costs as expenses that reduce profit, and that the strong growth of international financial reporting standards (IFRS) is an indication that the environment for international financial accounting is one that potentially encourages the consideration of alternative measurement and reporting such as the value of human resources using HRA methods. It was conducted in the United States of America and provides a brief overview of HRA from an international perspective.

Research Results:

- a) International contributions made to the field of HRA have resulted in growth of both the field HRA and the wider research of human capital, human resource metrics, intellectual capital, and organizational management.

- b) Both the process and inclusion of HRA measures in human resource decisions are expected to have implications from the standpoint of providing measures that can compete with other investment proposals for the firm's resources, and demonstrate that the long-term benefits from such investments can be positive.
- c) The movement toward fair value accounting seen in recent years, for both U.S.GAAP as well as for international standards, indicates a more sophisticated approach to the measurement of assets, tangible as well as intangible.
- d) Expressing human resource interventions in financial terms and /or cost benefit terms is more effective than using soft accounting information such as data on job satisfaction.
- e) If properly implemented, the human capital planning and budgeting process will become a key driver of strategy in that strategic human capital planning and budgeting ensures that the best resources are mobilized for each internal process

Research Recommendations:

- a) Thorough ROI evaluations training departments is needed to convince business leaders to view them as partners in creating the assets crucial to organizational success.
- b) Management should focus clearly on causal, leading indicators that drive successful financial measures, and that it is through skills-based budgeting that the fallacy of financial focus can be avoided.
- c) The value of human capital should be more fully considered when making decisions about the acquisition and disposal of people and that the accounting practices currently employed by companies can have an undue influence in driving the strategic decisions of these companies.

3.3.6 Novin & Bullen (2009): "Human Resource Accounting's Role In Organizational Sustainability".

This paper suggests that Human Resource Accounting (HRA) can facilitate enterprise sustainability in Georgia. HRA involves accounting for the company's management and employees as "human capital" or assets that provide future benefits. HRA may also include nonmonetary measures relating to an organization's human resources. HRA suggests that the process of measurement, as well as the measures themselves,

have relevance in managerial decision-making and result in decisions which are likely to support the organization's long-term sustainability and in turn increase stakeholder value and competitive advantage.

Research Results:

- a) HRA shows interesting origins based on a changing economic environment, and a multi-faceted growth continues in the field.
- b) HRA has implications as one of the measurement approaches for organizations striving to broadly improve sustainability.
- c) HRA involvement in the organization provides information that facilitates human resource investment with other investment proposals for the firm's resources, and demonstrates that the long-term benefits from such investments can be positive.
- d) HRA recognizes the long-term security of its most valuable capital investments and assets—its human assets-.

Research Recommendations:

- a) HRA is very important for organizations' stability, so it should be applied within the organization in order to get its long term benefits.
- b) Companies that seek reducing cost should find another way other than layoffs because they may affect future long-term flows profits from lost productivity, costs of rehiring and retraining when business returns, and costs of lower morale of existing workforce.

3.3.7 Adkins (2009): “Transforming the Human Resource Department into a Strategic Business Partner”.

This research is a dissertation for Master of Professional Studies Organizational Leadership/ Human Resources Administration in the United States. It seeks to prove that the human resource department is much more valuable to an organization as a strategic business partner than as a department of administrative assistants. Furthermore, this research provides a practical, effective, step by step process to transform the human resource department of any organization into an organization of strategic business partners through utilization of best practices which will improve overall effectiveness, efficiency, and profitability of an organization.

Research Results:

- a) HR department comprised of strategic business partners can contribute significantly to the overall business strategy of the organization, therefore proving that the strategic HR department is more valuable to an organization than a tactical HR department.
- b) There are some steps to follow to transit from tactical to strategic HR.
- c) There's a few information available about the results of many efforts have been made on defining and explaining the functions of strategic HR business partners.
- d) Very little research has been done which presents clear and accurate quantitative results of such an HR department

Research Recommendations:

- a) More companies should consider and shift the duties of HR from the clerical administrative work to HR responsibilities as a strategic partner which helps and supports attaining goals more effectively.
- b) More studies should be done to the field of strategic HR management to prove via measurable research that strategic HR assist organizations in reaching strategic goals more readily.
- c) Increase research that presents quantitative results in measuring strategic goals and how to be reached through HR as a strategic partner.

3.3.8 Glasgow, Vedd, Yoshikawa, & Innes (2009): "Human resource policies, accounting and organisational performance".

The purpose of the research was to build on the results of a previous project funded by CIMA on management accounting and strategic human resource management.

This research examined the relationship between human resource management (HRM), management accounting and organisational performance in six case research companies (two in Canada, two in Japan and two in the UK) and in 100 telephone interviews (40 in Japan, 30 in Canada and 30 in the UK). HR managers and management accountants were working closely together to develop strategic plans and annual budgets. In four of the cases, they also developed performance related bonus schemes in close collaboration and were involved in frequent communication on decision making.

Research Results:

- a) Recruitment, training, teamwork and organisational culture were the four HR policies mentioned by most interviewees in the six case studies as affecting organisational performance.
- b) It was evident that the companies in this research had made great efforts to link specific HR policies with organisational performance – despite the problem of the number of other factors affecting organisational performance.
- c) Organisational culture (with regards to employees) has a major impact on an organisation's performance.
- d) When employees are viewed as assets rather than simply costs, there is a positive impact on an organisation's performance. There is a link between training and an organisation's performance.

Research Recommendations:

- a) A mix of financial and non-financial measures should be used as it leads to improved organisational performance.
- b) More attention should be given to employees as the role of employees is critical in achieving an organisation's targeted performance.
- c) Teamwork has a major impact on an organisation's performance.
- d) Benchmarking is a useful technique for exploring the relationship between HR policies and an organisation's performance.
- e) Specific HR policies can be linked to an organisation's performance.

3.3.9 Alam & Kanti Deb (2009): "Human Resource Accounting Disclosure (HRAD) Bangladesh": Multifactor Regression Analysis – A Decisive Tool of Quality Assessment.

The paper investigates some corporate attitudes that influence human resource accounting disclosure in Bangladesh. the research aims at identifying the magnitude of Human Resource Accounting Disclosure (HRAD) by Bangladeshi listed companies, researching position of human resource reporting in Bangladesh, finding out relationship between corporation size and HRAD, and examining the relationship of profitability and HRAD of the listed companies in Bangladesh.

Research Results:

- a) In Bangladesh, market capitalization position, profitability, category of corporation and multinational affiliation and concentrated ownership have significant influence on human resource disclosure is that it can ensure major benefit to the society through ensuring greater transparency and higher productivity.
- b) Company size significantly associated with HRAD. The possible reason for the result could be that large companies in DSE and CSE are motivated to disclose more HRA information in their annual report to uphold their market value.
- c) The financial companies are disclosing HRA information than non-financial companies and company's profitability positively influences companies to report the information in their annual report.
- d) Highly regulated financial companies are disclosing more HRADI than non-financial companies

Research Recommendations:

- a) Further research can be done focusing on the reasons of reluctant attitude of listed companies in Bangladesh to disclose the HRA information.
- b) The scope of the research may be extended by increasing the sample size and cross-industry examination.

3.3.10 Abhayawansa & Abeysekera (2008): “An explanation of human capital disclosure from the resource based perspective”.

The purpose of this research is to address this dilemma by critically analyzing the conceptualisation of human capital in disclosure literature and introduce a more germane explanation. The research was conducted in Australia, it begins by reviewing the literature on intellectual capital disclosure (ICD) to examine the level of HC disclosure in various company media and use of such information by the capital market. It then critically analyse the conceptualisation of HC in those studies with a view to form an opinion about the adequacy of that conceptualisation.

Research Results:

- a) Resource based perspective enable HC to be depicted in a way that closely resembles the value creation potential of firms' employees.

- b) Substantial ICD literature conceptualise HC using human capital theory as a collection of knowledge and competences possessed by employees individually and collectively in firms.
- c) This has resulted in HC disclosure scores being considerably low compared to external and internal capital disclosure and does not portray HC in a way that is useful to the capital market.

Research Recommendations:

- a) This research provides guidance for future HCD and ICD studies to operationalise HC to reflect its value creation potential by encompassing not only the firm specific stock of knowledge and capabilities of employees but also the strategic human resource management practices, enabling corporate culture and the idiosyncratic systems and practices of the firm in place to reap the benefits of these.
- b) ICD research should distinguish between tactical and strategic HRM practices and fixed and variable HC, as the potential for competitive advantage lies in fixed inputs and strategic HRM practices, whereas variable inputs and tactical HRM practices are necessary elements for maintaining the status quo.
- c) Growth in the new economy characterized by information and knowledge rests substantially on HC, giving it a strong position over other resources.

3.3.11 Ionel & Dumitru (2008): “Human Resources Accounting – Accounting For the Most Valuable Asset of an Enterprise”

This article was conducted in Valahia University in Romania, it seeks to show the importance of human resources for an enterprise, what human resource accounting is, which would be its implications and what are its main objectives.

Research Results:

- a) Present accounting system ignores the importance of human resource value and Managers lack information about the effectiveness and efficiency of human resource investment.
- b) No model of HRA is accepted by the accounting bodies all over the world.
- c) HRA is basically an information system that tells management what changes are occurring over time to the human resources of the business. HRA also involves

accounting for investment in people and their replacement costs, and also the economic value of people in an organization.

- d) The more the company invests in human capital, the less the current net income.

Research Recommendations:

- a) Use data and information on human resources costs to base internal decisions and their disclosure through an annual report of the organization;
- b) Treating investments in staff development at the same level with other investments;
- c) Treating costs like staff training and development as capital investment expenditures that increase the productive capacity of employees.

3.3.12 Ya-hu & Wuhan (2007): "Human Resources Cost Accounting Based on standards and general rules".

This research studied the relevant human resources cost accounting issues that are interrelated with employees' salary and relevant expenditures in the United States on the basis of making comparisons with the relevant provisions in the new standards for employees' salary and general financial rules, international accounting standards, and relevant human resources cost accounting research achievements.

Research Results:

- a) The report of human resources cost is a component of human resources report as well as a part of financial statement.
- b) There are two choices to display consumed human resources cost in profit statement: (1) Listing direct labor cost of finished products, labor cost in manufacturing expenses, selling of management expenses, wages of managers, amortization amount of human resources and other human resources cost (compensatory spending of dismissal) in management expenses; (2) Only list the human resources expense in management expenses.
- c) The better way to reflect unconsumed human resources cost (unconsumed human resources cost of long-term human assets and short-term assets, such as products human resources cost and human resources cost to be amortized) and consumed

(expensed) human resources cost concentrated is to establish “Statement of Human Resources Cost”

Research Recommendations:

- a) The expenditures of human resources cost should be reflected in the three important statements: balance sheet, profit statement and cash flow statement.
- b) Contents need to be included are cash flow of unconsumed human resources cost, consumed human resources cost and expenditures of human resources cost.
- c) The “long-term human assets”, which is added in intangible assets item in balance sheet, shall reflect long-term initial assets value of human resources, amortization amount and net value.
- d) The short-term unconsumed human resources cost (direct labor cost of products, labor cost of manufacturing expenses and unamortized cost of short-term human assets) could be listed in items of inventories and expenses to be apportioned within one year in balance sheet

3.3.13 Lilley & Yakhou (2007): “Human Resource Accounting”.

This article was produced in Georgia, it discusses the historical background of HRA, its objectives, potential problems, as well as discussing the present value method created by Flamholtz for calculating human resources value as well as comparing it to other methods such as historical cost method, sophisticated methods, and others.

Research Results:

- a) Human resource accounting has been around for a long time and it has inspired much debate between accountants over whether people are assets and if they are assets how their value can be determined.
- b) The importance of human resource accounting is apparent. What is not apparent is the best method to use in human resource accounting.
- c) Human resource accounting should be implemented if a company wants its financial statements to be fairly stated.
- d) Human ability and knowledge is a great asset, and it is important these assets be recorded and accounted for.

Research Recommendations:

- a) Implementing HRA would give employees more bargaining power so the company has to figure out how to deal with Employees who have a high human resource value to the company.
- b) The use of human resource accounting does come with potential problems. These problems may arise in three different areas: the managers, the employees, and the process, so the organization should consider the following parties and the problems that may arise from the mentioned parties.

3.3.14 Verma & Dewe (2006): “Valuing Human Resources: Perceptions and Practices in UK organizations”.

This research focuses on exploring the reasons why measuring human resources is important to organisations in the United Kingdom, identifying current measurement practices, barriers to measurement and the progress expected in this field over the next five years.

Research Results:

- a) The moderate response from those in the finance/accounting function may suggest that measuring human resources is not currently a high priority.
- b) On the other hand, it may also suggest this group has not been sufficiently involved in this kind of work and one possible outcome from this research would be to call for a closer collaboration between the accounting profession and those working in human resources so that ideas can be shared and different techniques evaluated.
- c) In relation to barriers against implementation of human resource measures, the two main factors identified by most respondents, irrespective of sector, were lack of time and resources.
- d) Another common theme against valuation of human resources was the complexity and difficulty in doing this in practice.

Research Recommendations:

- a) The views of those involved in accounting and finance can be reconciled with those involved in human resource management.

- b) Human resource managers need the support of their accounting colleagues to be able to develop and initiate human resource measures.
- c) Human resource managers must gain the support of their accounting colleagues but their accounting colleagues need convincing that measurement is worthwhile.

3.3.15 Parameswaran & Jothi (2005): “Human Resource Accounting”.

This article discusses the Human Resource Accounting in India that human asset reporting usually includes a profile of human assets, the compensation pattern, training and development, human asset productivity, human asset value, and the total wealth of the organization. Also it discusses the development of HRA and the different methods of human resources measurement and accounting.

Research Results:

- a) Human resource accounting provides quantitative information about the value of human assets, which helps the top management to take decisions regarding the adequacy of human resources. Based on these insights, further steps for recruitment and selection of personnel are taken.
- b) Outside the organisation, quantitative data on the most valuable asset has an impact on the decisions of the investors, clients, and potential staff of the company.
- c) When proper valuation and accounting of the human resources is not done then the management may not be able to recognise the negative effects of certain programmes, which are aimed at improving profits in the short run. If not recognized on time, these programmes could lead to a fall in productivity levels, high turnover rate and low morale of existing employees.
- d) The training costs can be treated in a similar way as any other capitalized expense.

Research Recommendations:

- a) Human Resource Accounting is a must to improve human resource management, to overcome problems arising from the valuation of intangible assets and to overcome the difficulties in providing sufficient information to investors in traditional balance sheets.

- b) In conjunction with the need to develop a model that adequately measures the entire service potential for humans, is the need to create a model that meets certain accounting measurement standards.

3.3.16 Campbell & Deroose (2004): "Accounting for Human Resources in Dynamic Resource Allocation"

This research introduces the idea of using existing psychology research in the area of human factors to improve dynamic allocation of human resources. It focuses on one such human factor, namely attentional resources, and demonstrates how accounting for it can lead to an improvement in task distribution over naive load-balancing. It was conducted in Illinois with a primary focus to discuss and demonstrate how these principles can also be applied towards efficiently allocating dynamic tasks to human resources.

Research Results:

- a) Contextual and representational confusion refers to the intuitive idea that tasks dealing with differing contexts but presented with similar interfaces cause cognitive interference for the user, and are therefore more likely to suffer worse performance and a higher frequency of errors.
- b) Unlike attributes used for computational resources, human attributes are difficult to quantify and compare.
- c) If a system involves various types and degrees of qualification, and runs over a long enough period of time, the human's elements of the system could improve through learning.

Research Recommendations:

- a) Possible direction for future research is the real-time computation of quantitative measures of expertise based on a user's performance history.
- b) It might be worthwhile to assign non-critical tasks sub-optimally for the purpose of training or rehearsal.
- c) Compatibility between members of a team can play an important part in its performance, and finding which users work well together would be extremely useful when assigning team-based tasks.

3.3.17 Stovall (2001): "Accounting For Human Resources: Implications For Theory And Practice".

This research is a dissertation prepared for the Degree of Doctor of Philosophy at the University of North Texas, USA, and it aims to renew the dialogue in accounting that began among HRA proponents thirty years ago. To test the extent to which classifying, investments in human resources (training costs) influences the judgments of financial analysts. A related objective is to assess the degree to which financial analysts accept or reject alternative descriptions of human resources, such as (1) an "objective" historic cost-based model versus (2) a hypothetical, future-oriented replacement cost model or reporting such investments.

Research Results:

- a) Objectivity and reliability, defined and reified as recognition criteria, may continue to affect how users react to financial reporting concepts that they find are inconsistent with current accepted practice.
- b) Related to the buying judgment indicate that users may continue to perceive objectivity as achieved through standardization and rule compliance rather than through the application of expert judgment in financial reporting.
- c) Despite the potential unintended consequences of the audit opinions overpowering the human resource accounting operationalization on the financial statements, this research still provides accounting academia and practice with some interesting implications.
- d) Sometimes, the financial auditor should apply expert judgment rather than apply "the rules" in trying to achieve objectivity and information usefulness.

Research Recommendations:

- a) One area for potential future research from this dissertation would be to explore other changes in the accounting vocabulary (language) with respect to intellectual capital.
- b) Another direction for future research is the potential to integrate Porter's (1995) work concerning objectivity in accounting into the critical and behavioral accounting literature.

- c) This research provides potential for accounting theorists and practitioners to sustain a dialogue that may help ameliorate some of the informational deficiencies present in the historical cost accounting model due to the bias toward reliability.

3.3.18 Arboleda and Ericta (2000): “Proposed Framework for Household and Human Resources Satellite Accounting”.

This paper attempts to provide the framework for the development of household and human resources satellite accounts in India that are anchored on the central framework of the 1993 SNA. The proposed human resource accounting in this paper attempts to go beyond the Household satellite accounts by incorporating the activities of the individual (first person) that contribute to own well-being. There will also be no attempt to monetize all the flows.

Research Results:

- a) Human resource accounting goes beyond the household satellite accounts by focusing on human resources, disaggregated by sex and age grouping representative of the life cycle.
- b) The proposed households and human resource satellite accounts attempt to systematize the compilation of statistics for analyzing issues related to human development and gender equality.
- c) The statistics generated by the household satellite accounts are still in monetary units, as is the case in the integrated economic accounts of the household sector.

Research Recommendations:

- a) More researches and work need to be done in further developing the conceptual and operational aspects of the HRA frameworks.
- b) An interaction between and among statisticians, academicians, policy and planning experts, and national accountants is required to achieve further progress.
- c) There's a need for an appropriate estimation methodology for valuation of outputs of the different production activities included in the household satellite accounts.

3.3.19 Bullen & Novin (2000): "Human Resource Accounting and The Balanced Scorecard".

This paper investigates how Human Resource Accounting (HRA) measures may be useful as a component of the Balanced Scorecard. The authors believe that Human Resource Accounting measures incorporated in a Balanced Scorecard performance measurement system can help an organization define and orchestrate its strategy for success, it was conducted in Georgia, also discussing layoff decisions using HRA and balanced scorecard.

Research Results:

- a) Significant interest in HRA has expanded and crossed over into fields other than accounting including economics, organizational management, organizational culture and inspired related research.
- b) This paper has explored how Human Resource Accounting measures incorporated in a Balanced Scorecard performance measurement system can help an organization define and orchestrate its strategy for success.
- c) The Balanced Scorecard approach to performance measurement which has gained substantial attention and use in recent years provides further opportunities for utilization of Human Resource Accounting measures.

Research Recommendations:

- a) HRA measures should be used to determine the actual layoffs cost.
- b) The Balanced Scorecard should be used as it recognizes the importance of the process of measurement in getting management to pay attention to strategic areas that will improve the long-term success.
- c) HRA may best be used as a managerial tool to aid in making decisions that will benefit the long-run strategic goals and profitability of the company.

3.3.20 Pehkonen & Savo (2000): "Human Resources Accounting for OC-System Oy in 1999.

The research deals with the human resources of OC-System Oy from the management's point of view. It took some cases represented in Finnish companies to conduct this research. The purpose was to calculate the personnel costs and collect various data on the personnel in order to obtain a tool for making plans for developing

the company's human resources. Another objective was to enable the company to implement human resources accounting also in the future.

Research Results:

- a) The company's development is expected to be positive both in terms of productivity and financial results.
- b) The development of the company's financial results is on a sustainable basis.

Research Recommendations:

- a) The company should develop the reporting on the human resources and should consider also acquiring a data base system for the personnel administration, which would make it considerably easier to collect data.
- b) The acquisition of the data should be assigned to a person who would be responsible for it and the data to be acquired by means of reporting should be defined.
- c) The registering of some data should also be more accurate, for example the data on subcontracting and training and the costs incurred by training.
- d) The company is also recommended to extend the human resources accounting to include also qualitative data.

3.3.21 Rowbottom (1998): "Intangible Asset Accounting and Accounting Policy Selection in the Football Industry".

This research is a dissertation prepared for the Degree of Doctor of Philosophy, and it aims to evaluate the feasibility of intangible asset accounting in financial reporting with particular reference to the football industry. It also examines related accounting policies. Lack of reliable measurement is the major obstacle to the recognition of intangible assets. The research was conducted in Birmingham University, United Kingdom, and the sample of the research was some football teams in UK.

Research Results:

- a) The acceptance of intangible asset policies as legitimate and credible, despite the market orientated bias of traditional financial reporting.

- b) The ability to reliably measure intangible assets is regarded as crucial to their recognition in financial reporting
- c) Size may be a mitigating factor in testing the association between debt contracting costs and accounting policy choice in the football industry.
- d) The inefficiency of DEBT could also be affected by the financing arrangements of football club companies.

Research Recommendations:

- a) Football club companies must be assessed as businesses and not given any special treatment because football is a high profile public sport.
- b) Book values rather than market values should be used because it is not possible to obtain market values of debt (and equity) for most football clubs
- c) The use of Human Resources Accounting should be used carefully to regulate and increase sign on and transfer fees.

3.3.22 Narayanankutty (1993): "The Role of Human Resource Accounting in Human Resource Management"

This article discusses the valuation models of human resources on Cochin Port Trust organization in India through different periods of years, displaying the benefits of the HRA, and what items can be included in the calculation of HR investment.

Research Results:

- a) The HRA system tries to evaluate the worth of Human Resources of an organisation in a systematic manner as a whole to the organisation and the society and record them for presenting the information in a significant manner in the financial statement to communicate their worth with changes over the period and results obtained from their utilization to the uses of financial statements.
- b) The amount of investment made in the Human Resources and its value can be utilised by the Human Resources management personnel to determine how far the investment in Human Resources is utilised by the management in producing income for the organisation. Such information will be in the best interest of the Management Human Resources and the Society.

- c) The Human Resources - an indispensable but often neglected element is thus foregrounded into the industrial arena for the betterment of the economy.

Research Recommendations:

- a) HRA system needs to be improved by Cochin Port Trust organization to suit its strategic goals.
- b) The Human Resources of Cochin Port Trust needs to be utilized more by management.
- c) Times Rate of Returns is a technique should be employed for measuring the efficiency of human resource of organization, as it is considered as a direct indicator of the production performance of the human resource

3.4 General Commentary on Previous Studies

As the subject of HRA is getting more and more interest and focus due to the importance of human resources in today's firms all over the world, the previous studies and articles were collected from many countries and backgrounds, which gives the researcher a clear vision of HRA literature, definition, importance and its objectives.

Based on previous studies, this research constructs its hypotheses, and some of notes can be highlighted:

- a) Most studies discussed development of HRA and its effect on financial statements and decision making process.
- b) Previous studies have discussed and examined HRA application and the best valuing model within many contexts such as (Syria, Kuwait, Scandinavia, Australia and New Zealand, United Kingdom, China, India, Portugal, Germany, Canada, United States of America, Bangladesh and Greece)
- c) Previous studies argued about finding the best model for HR valuation, as the company's size, policy, industry, personnel management, financial system should be taken into consideration in designing the HRA model.
- d) This study complies with previous studies that it discusses HRA historical background and progress, its different models that have been developed by researchers over time, as well as, its effect on decision making process.

- e) HRA was highlighted and discussed in many foreign studies and articles, showing its importance and potential for application more than in Arabic studies, that's why there're a few Arabic studies or articles that discuss the HRA aspects.
- f) Many previous studies have developed some models to measure the value of human resources but most of the previous studies haven't focused on the relationship between the Human Resources Department and the Financial Department.
- g) Although the previous studies stated that HRA gained a lot of interest in foreign countries, it is still not applied as it should be, also top management as well as accountants doesn't consider HRA as a priority, and traditional financial statements aren't ready for this type of value calculation.
- h) All studies confirmed the importance of HRA application in the different types of organizations, recognizing its long term benefits.
- i) Previous studies focused on HRA importance and history rather than focusing on its application
- j) This study differs from other previous studies that it focuses on the HRA requirements needed for its application.
- k) This study serves as a primary basis for investigating HRA requirements for applying HRA in major semi public organizations in Gaza Strip.
- l) Despite cultural differences between foreign studies and this study that is conducted in the Palestinian semi public sector, they agreed on the necessity of all HRA requirements availability to be applied effectively.
- m) There's no one local research discussing HRA concept nor its implications, because it's a relatively modern concept and it is very complicated to be applied, also because still the local companies in Palestine use the traditional accounting standards and forms, also it's the first to discuss this topic in semi public organizations in Gaza strip.

Accordingly, and based on the previous studies results and recommendations, this research was constructed to reconcile some of the limitations found in those studies, also to be the first to discuss this subject locally and to investigate and asses the availability of HRA requirements in Palestinian institutions such as GEDCO and CMWU.

Chapter Four

Study Population Profile

4.1 Introduction

4.2 Gaza Electricity Distribution Company

4.3 Coastal Municipalities Water Utility

4.1 Introduction

The research population consisted of two major semi public organizations in Gaza Strip working in Water and Electricity services provision which are: Coastal Municipalities Water Utility and Gaza Electricity Distribution Company; the sample consisted on 194 employees from both institutions, excluding operational team.

The following information mentioned about both organizations are extracted from their official websites, so as to have an idea about their profiles (www.cmwu.ps, www.gedco.ps).

4.2 Gaza Electricity Distribution Company

4.2.1 GEDCo Establishment Definition

GEDCo was established in 1998 by a ministerial decree whereby the duties of distribution electrical energy was transferred from the different municipalities in Gaza Strip to GEDCo, the first bill was issued in 1998. It's owned by the Palestinian National Authority, represented by the Palestinian Energy and Natural Resources Authority, the ministry of finance , Gaza Governorate municipalities and the local councils. GEDCo provides service to the whole areas in Gaza Strip. The service is provided to an area of 360 km square to around 1.5 million people, the responsibilities of GEDCo are collecting of the electricity monthly bill, technical supervision, maintenance work and improvement of the electricity supplying system.

4.2.2 GEDCo Objectives

GEDCo strives to achieve the following objectives:

- a) Secure the delivery of the electrical energy to the different sectors of customers (Domestic, industrial, commercial sectors and governmental sites) based on high quality the optimum technical standards.
- b) Set the distribution service at high level of quality to assure the continuation of the service.
- c) Rehabilitate the old part of the network and replace it with new one.
- d) Install new electrical transformers and maintain the already installed electrical transformers.
- e) Set up future plans to improve the distribution network to adapt the increase in the loads as a result of the increase in the demanding energy.

- f) Improve the system and the taken activities of the safety measures and precaution on the network and improve the environmental safety.
- g) Deploy information technology systems used on the network.
- h) Provide technical training courses to the human resources at GEDCo to meet up with the needs of the customers to be served in an optimum way.
- i) If any losses or damages incurred as a result of the Israeli Incursions , GEDCo is responsible to reconnect the electrical energy to the people after every incursion.
- j) Contact the needed researches to set up future plans to extend and improve the entire distribution network.

4.2.3 GEDCO Branches

GEDCO has eight branches in the following areas:

- a) Gaza Office: Main branch in Talatiny Street.
- b) Northern District branch.
- c) Eastern Gaza building.
- d) Middle Branch.
- e) Khanyounis Branch.
- f) Rafah Branch.
- g) East Khanyounis office.

4.3 The Coastal Municipalities Water Utility

4.3.1 CMWU Establishment Definition

The Coastal Municipalities Water Utility is a financially independent Semi – Public entity consolidating 25 municipal water departments in the Gaza Strip. It was established according to Ministerial Decree No (1) for the year 2000 to hold responsibility for the water supply services, wastewater treatment and disposal and storm water collection.

The Coastal Municipalities Water Utility institutional framework setup includes creating and/or appointing the various necessary bodies such as: the General Assembly and the Board of Directors of the Utility; the Project Management Unit, the Steering Committee, the Operation Team who is managed by the Project Management Unit, and an International independent Auditor.

The implementation of the Gaza II Emergency Water Project (GEWP) has started on the 1st of July 2005 under a Management Contract signed between the CMWU and the operator, INFRAMAN Consortium (short-listed firm from Austria). The project is financed by the World Bank. Due to the security and political volatility, INFRAMAN had suspended their activities under GEWP by the end of February 2008 which led to contract termination on March 2008. Since then the CMWU enacts the so called “Plan B” (restructuring the Project Management). The CMWU under GEWP could achieve some of the project objectives especially those related to the Utility restructuring component such as: developing the Billing and collection system, and setting up of the administrative and financial system of the utility (**The Project Management Unit, 2008**).

4.3.2 CMWU Objectives

Since its establishment, CMWU focused on the following objectives:

- a) Structuring the newly established utility by proposing its organization structure, staffing plan, payroll system, human resource management, strengthening the capital investment and planning systems.
- b) Improving water quantity by reducing water losses and increasing the supply capacity.
- c) Improving water quality via the maintenance and upgrade of the existing disinfection program and improving the performance of the existing wastewater works.
- d) Improving the management systems of the water and wastewater services with emphasis on operation and maintenance systems, financial management, customer services, billing and collection, human resources development. In addition to technical objectives concerning water quality, a salient managerial objective was to improve the billing system aiming at cost recovery
- e) Strengthening of the operations through a performance based management contract, and strengthening the institutional capacity by providing support in the areas of project management, accounting, sanitation services, licensing and technical and financial auditing.

4.3.3 CMWU Branches

The Coastal Municipalities Water Utility has four offices around Gaza strip:

- a) Gaza office (headquarter)
- b) Rafah regional office
- c) Khanyounis regional office
- d) Middle area regional office.

Chapter Five

Research Design and Methodology

Section One: Methodology and Procedures

Section Two: Testing Research Tool

Section One

Methodology and Procedures

5.1.1 Introduction

The research tries to explore the main requirements of implementing HRA in major semi-public organizations in Gaza strip. The adopted methodology and procedures used to achieve the research goals include the study of the characteristics of the research sample, the types and sources of data, statistical analysis tool as well as procedures for the application study.

5.1.2 Research Methodology

The research follows the analytical descriptive methodology approach to describe the basic features of the data in a research. The Analytical Descriptive methodology is the best methodology to be used because it is non-experimental in that it deals with the relationships existed between non-manipulated variables in a natural, rather than artificial setting. Since the events or conditions of the research interest have already existed and practiced, the researcher focuses and selects the relevant variables to analyze the relationships in the hypotheses (**Chambers & Skinner, 2003**).

5.1.3 Research Procedure

- a) The first phase of the research is thesis proposal which included identifying and defining the problems and establishment objective of the research and development research plan.
- b) The second phase of the research included a summary of the comprehensive literature review. Literatures on human resource, HRA models, HRA effects, HRA requirements, treatment of HRA, major semi public organizations background and previous studies were reviewed.
- c) The third phase of the research focused on the modification of the questionnaire design, through distributing the questionnaire to pilot study. The purpose of the pilot study was to test and prove that the questionnaire questions are clear to be answered in a way that help to achieve the target of the study.
- d) The fourth phase of the research included a field survey to distribute the questionnaires, which was conducted on two major semi public organizations in Gaza Strip (Coastal Municipalities Water Utility and Gaza Electricity Distribution

Company). This questionnaire was used to collect the required data in order to achieve the research objective, 210 questionnaires were distributed to the research population, and 194 questionnaires were received.

- e) The sixth phase of the research was data analysis and discussion. Statistical Package for the Social Sciences (SPSS 20) was used to perform the required analysis.
- f) The final phase includes the conclusions and recommendations.

5.1.4 Sources of Data

The data of the questionnaire was gathered carefully and accurately to achieve the research's objectives. There were two sources of data:

- a) Secondary Data: Secondary data were obtained from journals that discussed HRA. Also, many thesis and dissertations were accessed through universities electronic theses and dissertations and through some essays on the website. Some textbooks were available. Also, websites and brochures of CMWU and GEDCo.
- b) Primary Data: This data was collected from the field by questionnaire. Questionnaire was designed and distributed to get responses from target group of the research during their working hours. Respondents were asked to provide opinions on the variables of this research, such as management support, financial resources available, human resource information system, human resource measure reliability, and financial system used.

5.1.5 Research Population

The research population includes the employees of two major semi public organizations working in Gaza Strip; the Coastal Municipalities Water Utility and Gaza Electricity Distribution Companies, that work in Water services and Electricity services provision relatively, and they include diverse workforce in age, gender, educational background, etc, they are considered the major semi public organizations due to their core business as well as their sizes, CMWU has 161 employees in Gaza, while GEDCo has 210 employees in Gaza Strip .

5.1.6 Research Sample

A simple random sample was conducted. A simple random sample is a technique by which a sampling procedure assures that each element in the population has an equal chance of being selected in the sample in order to increase the efficiency.

The targeted respondents of this research are all employees except the operational level and the supporting team such as (care takers, guards, ..etc), because the HRA system is a comprehensive system that should affect all employees, but since it is considered as a new concept, it requires a more educated, knowledgeable, and experienced respondents to achieve the research objectives and well asses the HRA system application in the investigated organizations.

A total of 210 questionnaires have been distributed by proportional allocation to the Coastal Municipalities Water Utility and the Gaza Electricity Distribution Company, according to sampling size. A total of 194 answered questionnaires were received for an answered response rate of 92.38% as 99 questionnaires were received from CMWU and 95 questionnaires were received from GEDCo.

The sample is calculated through the formula:

$$n = \left(\frac{Z}{2m} \right)^2 \quad (1)$$
$$n = \left(\frac{1.96}{2 \times 0.05} \right)^2 \cong 384$$

Z: confidence level at 95% (standard value of 1.96)

m: margin of error at 5% (standard value of 0.05)

www.surveysystem.com/sscalc.htm

$$n_{\text{Mod.}} = \frac{nN}{N + n - 1} \quad (2)$$

$$n_{\text{Mod.}} = \frac{384 \times 371}{371 + 384 - 1} \cong 189$$

N: Population Size

5.1.7 Questionnaire Design

A survey questionnaire was designed to collect the research's primary data. The questionnaire included close-ended questions to facilitate the data collection process.

The design of questionnaire affected the response rate and the reliability and validity of the data collected. Response rates, validity and reliability are maximized by careful design of individual questions, clear layout of the questionnaire form, lucid explanation of the purpose of the questionnaire and pilot testing. The questionnaire is composed of sections to accomplish the aim of the research, as follows:

- a) Section one: was concerned with personal information about the respondents and their organization (name of the organization, gender, age, educational level, Job title, years of experience, and years of work in the organization).
- b) Section two: was concerned with organization information (years of operation, number of employees, field of work, location).
- c) Section three: focused on measuring the effect of management support on HRA in the organization.
- d) Section four: focused on measuring the effect of financial resources available on HRA in the organization.
- e) Section five: focused on measuring the effect of human resource information system on HRA in the organization.
- f) Section six: focused on measuring the effect of human resources measure reliability on HRA in the organization.
- g) Section seven: focused on measuring the effect of financial system used on HRA in the organization.
- h) Section eight: is a scale from 1-10 to measure the employees' satisfaction towards valuing employees in her/his organization

The Questionnaire was drawn in Arabic version to be understood by the entire sample when was surveyed in the Gaza Strip. The questions were arranged in a logical order and a proper sequencing.

5.1.8 Date Measurement and Statistical Analysis Tools

In order to be able to select the appropriate method of analysis, the level of measurement must be understood. For each type of measurement, there is/are an appropriate method/s that can be applied and not others. In this research, ordinal scales were used. Ordinal scale is a ranking or a rating data that normally uses integers in ascending or descending order. The numbers assigned to the important (1,2,3,4,5) do not indicate that the interval between scales are equal, nor do they indicate absolute

quantities. They are merely numerical labels. Based on Likert scale the researcher has used the following:

Item	<i>Strongly Agree</i>	<i>Agree</i>	<i>Neutral</i>	<i>Disagree</i>	<i>Strongly Disagree</i>
Scale	5	4	3	2	1

The researcher used data analysis both qualitative and quantitative data analysis methods. The Data analysis conducted using (SPSS 20). The researcher utilized the following statistical tools:

- a) Kolmogorov-Smirnov test of normality.
- b) Pearson correlation coefficient for Validity.
- c) Cronbach's Alpha for Reliability Statistics.
- d) Frequency and Descriptive analysis.
- e) Parametric Tests (One-sample T test, Independent Samples T-test, Analysis of Variance). *T-test* is used to determine if the mean of a paragraph is significantly different from a hypothesized value 3 (Middle value of Likert scale). If the P-value (Sig.) is smaller than or equal to the level of significance, $\alpha = 0.05$, then the mean of a paragraph is significantly different from a hypothesized value 3. The sign of the Test value indicates whether the mean is significantly greater or smaller than hypothesized value 3. On the other hand, if the P-value (Sig.) is greater than the level of significance, $\alpha = 0.05$, then the mean a paragraph is insignificantly different from a hypothesized value 3. The *Independent Samples T-test* is used to examine if there is a statistical significant difference between two means among the respondents toward "The Assessment of Human Resource Accounting Application in Major Semi-Public Organizations in Gaza Strip" due to (Name of Organization, and Gender). The *One- Way Analysis of Variance (ANOVA)* is used to examine if there is a statistical significant difference between several means among the respondents toward "The Assessment of Human Resource Accounting Application in Major Semi-Public Organizations in Gaza Strip" due to (Age, Educational Level, Job Title, Years of work in the Organization and Years of Experience).

5.1.9 Questionnaire Procedures

The researcher utilizes the following questionnaire procedures:

- a) Upon designing the questionnaire, it was reviewed and modified by research supervisor.
- b) The modified copy was given to a number of 9 referees, including academics and civil society who have excellent knowledge and expertise in the area of the research topic.
- c) The questionnaire was modified based on the referee's comments and a pilot sample of 30 questionnaires was distributed to help test the validity and reliability of the questionnaire.
- d) Based on the pilot phase findings, it was concluded that the questionnaire is ready to be distributed as a final copy.

Section two

Testing Research Tool

5.2.1 Introduction

This section addresses the examination of validity and reliability of the tool in terms of the sincerity of the questionnaire by (Pre-Pilot validity) referees' comments and the results of internal consistency of the structural identification. Then the stability of the questionnaire includes the coefficient Cronbach's coefficient alpha and split half method to exit questionnaire in its final form. Validity refers to the degree to which an instrument measures what it is supposed to be measuring. Validity has a number of different aspects and assessment approaches. External (Pre-Pilot) validity is used to identify potential problems and statistical validity is used to evaluate instrument validity, which include internal validity and structure validity (**Pilot and Hungler, 1985**).

5.2.2 External (Pre-Pilot) Validity of the Questionnaire

It is essential to pre-pilot the questionnaire to identify any ambiguities in the questions and to identify the potential problems for each question. In order to assure high level of reliability and validity for the developed tool, the researcher had taken the approval of the supervisor to review the tool on Academic and Professional levels to ensure its relevance and stability. Reviewing of questionnaire with academic and business people who have had long-time experiences in business practice environment, were conducted in order to ensure logic, that included eight of academic staff from Universities and one of professionals from Palestinian Semi Public Sector reviewed the tool. The reason for including professional was to assure that the statement truly addressed the critical areas from the professional perspective (**Pilot and Hungler, 1985**).

5.2.3 Validity of the Questionnaire

Validity refers to the degree to which an instrument measures what it is supposed to be measuring. Statistical validity is used to evaluate instrument validity, which include internal validity and structure validity. Validity has a number of different aspects and assessment approaches. The first test is internal validity test (Pearson test), which measures the correlation coefficient between each paragraph in one field and the whole field. The second test is structure validity test (Pearson test) that was used to test

the validity of the questionnaire structure by testing the validity of each field and the validity of the whole questionnaire. It measures the correlation coefficient between one field and all the fields of the questionnaire that have the same level of similar scale (**Pilot and Hungler, 1985**).

5.2.3.1 Internal Validity of the Questionnaire

Internal validity of the questionnaire is the first statistical test that used to test the validity of the questionnaire. It is measured by a scouting sample, which consisted of 30 questionnaires through measuring the correlation coefficients between each paragraph in one field and the whole field as follows:

- a) Measuring the correlation between the " Evaluation of top management support " and the total of the field

Table (5.1): Correlation coefficient of each paragraph of " Evaluation of top management support " and the total of this field

No.	Paragraph	Pearson Correlation Coefficient	P-Value (Sig.)
1.	Top management has general understanding about the HRA	.814	.000*
2.	Top management has awareness on the importance of HRA application	.795	.000*
3.	Top management has got training in HRA	.777	.000*
4.	Top management apply HRA in the institution	.775	.000*
5.	Top management uses HRA system in its employees-related decisions	.751	.000*
6.	The institution considers employees as her most valuable assets	.763	.000*
7.	Employees turnover rate is considered relatively low compared to other institutions because they care more about keeping their effective employees	.416	.011*
8.	HRA system is designed depending on management expertise	.771	.000*
9.	HRA system is designed depending on specialized consultants assistance	.816	.000*
10.	Top management has awareness on employees performance appraisal importance in HRA application	.677	.000*
11.	Management gives high attention to using performance appraisal results in HRA	.810	.000*
12.	The institution cares about providing employees with training courses in HRA	.601	.000*
13.	Management makes promotion or bonus decisions based on HRA application results	.728	.000*
14.	Management provide employees with awareness programs about valuing them as one of the institution assets	.683	.000*
15.	Top management provides incentives to the employee based on his/her productivity and his financial value	.540	.001*

* Correlation is significant at the 0.05 level

Table (5.1) clarifies the correlation coefficient for each paragraph of the " Evaluation of top management support " and the total of the field. The p-values (Sig.) are less than 0.05, so the correlation coefficients of this field are significant at $\alpha = 0.05$, so it can be said that the paragraphs of this field are consistent and valid to measure what it was set for.

b) Measuring the correlation between the "Evaluation of available financial resources" and the total of the field

Table (5.2): Correlation coefficient of each paragraph of " Evaluation of available financial resources " and the total of this field

No.	Paragraph	Pearson Correlation Coefficient	P-Value (Sig.)
1.	Your institution keeps an independent fund for the Human Resources Department	.742	.000*
2.	Your institution keeps a special fund for HRA system application	.834	.000*
3.	Your institution specializes a specified budget for employees training to raise their monetary value	.647	.000*
4.	Future employment plans has a good budget to guarantee choosing the best and most value adding to the institution	.764	.000*
5.	The budget specialized for applying HRA is enough for covering its cost such as financial bonuses or incentives	.639	.000*
6.	Your institution finances training programs in HRA major	.718	.000*
7.	New projects that aim at raising employee's value are highly encouraged by your institution (such as job rotation, internal and external training courses, etc)	.487	.004*

* Correlation is significant at the 0.05 level

Table (5.2) clarifies the correlation coefficient for each paragraph of the " Evaluation of available financial resources " and the total of the field. The p-values (Sig.) are less than 0.05, so the correlation coefficients of this field are significant at $\alpha = 0.05$, so it can be said that the paragraphs of this field are consistent and valid to measure what it was set for.

c) Measuring the correlation between the "Evaluation of Human Resources Information system " and the total of the field

Table (5.3) : Correlation coefficient of each paragraph of " Evaluation of Human Resources Information system " and the total of this field

No.	Paragraph	Pearson Correlation Coefficient	P-Value (Sig.)
1.	There's a complete database for the employees in the Human Resources Department that is used for in HRA	.761	.000*
2.	There's competencies and skills database required for each employee according to his job title and position	.796	.000*
3.	Human Resources Department updates employees' information regularly and continuously	.713	.000*
4.	There're clear systems and policies for career planning and job scale for all departments that clarifies each employee's career path in the institution	.647	.000*
5.	There's a unified comprehensive system that clarifies Human Resources policies	.600	.000*
6.	The employee's file (including his educational certificates, training, and performance appraisal results) affects HRA based decisions such as promotion, and salary annual increase	.767	.000*
7.	Information in the employee's file is comprehensive and enough for valuing the employee as an asset	.755	.000*
8.	The direct supervisor cooperates with Human Resources Department in valuing his/her employees as institution's assets	.691	.000*
9.	Calculating employee's value as an asset encourages him/her to improve and enrich his/her personal file and update his/her information at the Human Resources Department	.382	.018*
10.	An electronic system is used for collecting, storing employees' data and documents to reduce mistakes	.567	.001*
11.	There's a complete database for the employees in the Human Resources Department that is used for in HRA	.650	.000*

* Correlation is significant at the 0.05 level

Table (5.3) clarifies the correlation coefficient for each paragraph of the "Evaluation of Human Resources Information system " and the total of the field. The p-values (Sig.) are less than 0.05, so the correlation coefficients of this field are significant at $\alpha = 0.05$, so it can be said that the paragraphs of this field are consistent and valid to measure what it was set for.

d) Measuring the correlation between the "Evaluation of HR measures reliability" and the total of the field.

Table (5.4): Correlation coefficient of each paragraph of " Evaluation of HR measures reliability " and the total of this field

No.	Paragraph	Pearson Correlation Coefficient	P-Value (Sig.)
1.	Human Resources Department has enough expertise and knowledge to perform proper performance appraisal	.701	.000*
2.	Performance appraisal is done on a regular basis for employees	.639	.000*
3.	High attention is given for employees' performance appraisal results	.678	.000*
4.	Employees' performance appraisal results occupy the highest weight in valuing employees as assets	.698	.000*
5.	Human Resources Department has an expert team with qualification and enough knowledge to manage change and perform HRA	.773	.000*
6.	There's a clear plan for applying HRA	.503	.003*
7.	Human Resources Department provides employees with training courses to deal with new systems	.742	.000*
8.	Human Resources Department evaluates every training course provided for employees	.663	.000*
9.	Employees' performance are reevaluated after any training course or developmental program	.621	.000*
10.	HR Department team initiate with employees' awareness regarding any new system	.817	.000*
11.	There's a succession planning for top management future vacancies	.437	.008*
12.	The institution strives to maintain a fair internal system that equals between required job duties and salary paid	.685	.000*

* Correlation is significant at the 0.05 level

Table (5.4) clarifies the correlation coefficient for each paragraph of the "Evaluation of HR measures reliability" and the total of the field. The p-values (Sig.) are less than 0.05, so the correlation coefficients of this field are significant at $\alpha = 0.05$, so it can be said that the paragraphs of this field are consistent and valid to measure what it was set for.

e) Measuring the correlation between the " Evaluation of Financial system used" and the total of the field

Table (5.5): Correlation coefficient of each paragraph of " Evaluation of Financial system used " and the total of this field

No.	Paragraph	Pearson Correlation Coefficient	P-Value (Sig.)
1.	Financial system used has the ability to calculate Human Resources value	.786	.000*
2.	Financial system used contributes in calculating Human Resources value	.749	.000*
3.	There's an internal audit on Human Resources value calculation	.787	.000*
4.	Accurate information and values can result from the financial system used regarding HRA	.597	.000*
5.	The financial system used can be developed to serve new systems application for Human Resources Department	.457	.006*
6.	Financial reports produced by the financial system used that calculate HR value have a great impact on top management and Board of Directors decision making	.472	.004*

* Correlation is significant at the 0.05 level

Table (5.5) clarifies the correlation coefficient for each paragraph of the "Evaluation of Financial system used" and the total of the field. The p-values (Sig.) are less than 0.05, so the correlation coefficients of this field are significant at $\alpha = 0.05$, so it can be said that the paragraphs of this field are consistent and valid to measure what it was set for.

5.2.3.2 Structure Validity of the Questionnaire

Structure validity is the second statistical test that used to test the validity of the questionnaire structure by testing the validity of each field and the validity of the whole questionnaire. It measures the correlation coefficient between one field and all the fields of the questionnaire that have the same level of liker scale.

Table (5.6): Correlation coefficient of each field and the whole of questionnaire

No.	Field	Pearson Correlation Coefficient	P-Value (Sig.)
1.	Evaluation of top management support	.845	.000*
2.	Evaluation of available financial resources	.849	.000*
3.	Evaluation of Human Resources Information system	.925	.000*
4.	Evaluation of HR measures reliability	.876	.000*
5.	Evaluation of Financial system used	.522	.002*

* Correlation is significant at the 0.05 level

Table (5.6) clarifies the correlation coefficient for each field and the whole questionnaire. The p-values (Sig.) are less than 0.05, so the correlation coefficients of

all the fields are significant at $\alpha = 0.05$, so it can be said that the fields are valid to measure what it was set for to achieve the main aim of the study.

5.2.4 Reliability of the Research

The reliability of an instrument is the degree of consistency which measures the attribute; it is supposed to be measuring. The less variation an instrument produces in repeated measurements of an attribute, the higher its reliability. Reliability can be equated with the stability, consistency, or dependability of a measuring tool. The test is repeated to the same sample of people on two occasions and then compares the scores obtained by computing a reliability coefficient Cronbach's coefficient alpha and split half method is used to measure the reliability of the questionnaire between each field and the mean of the whole fields of the questionnaire (Polit & Hunger, 1985).

5.2.5 Cronbach's Coefficient Alpha

This method is used to measure the reliability of the questionnaire between each field and the mean of the whole fields of the questionnaire. The normal range of Cronbach's coefficient alpha value between 0.0 and + 1.0, and the higher values reflects a higher degree of internal consistency. The Cronbach's coefficient alpha was calculated for each field of the questionnaire.

Table (5.7): Cronbach's Alpha for each field of the questionnaire and the entire questionnaire

No.	Field	Cronbach's Alpha
1.	Evaluation of top management support	.936
2.	Evaluation of available financial resources	.814
3.	Evaluation of Human Resources Information system	.872
4.	Evaluation of HR measures reliability	.885
5.	Evaluation of Financial system used	.716
	All paragraphs of the questionnaire	.965

Table (5.7) shows the values of Cronbach's Alpha for each field of the questionnaire and the entire questionnaire. For the fields, values of Cronbach's Alpha were in the range from .716 and .936. This range is considered high; the result ensures the reliability of each field of the questionnaire. Cronbach's Alpha equals .965 for the entire questionnaire which indicates an excellent reliability of the entire questionnaire. Thereby, it can be said that the researcher proved that the questionnaire was valid, reliable, and ready for distribution for the population sample.

Chapter Six

Data Analysis and Hypotheses Testing

6.1 Introduction

6.2 Test of Normality

6.3 Descriptive Analysis of the Sample Statistics

6.4 Data Analysis

6.5 Hypotheses Testing

6.1 Introduction

The aim of this chapter is to analyze the empirical data which was collected through the questionnaire in order to provide a real picture about the HRA applicability in CMWU and GEDCo. This chapter includes 4 main sections. The first is test of normality. The second is about descriptive analysis (the organizational and personal characteristics) which will be presented and discussed. The third is about Data analysis (Means and Test values for each field). The fourth section is hypotheses testing. The findings that respond to these questions and objectives will be discussed and compared to previous findings in other studies.

6.2 Test of Normality for each field

Kolmogorove- Smirnov test is used to identify if the data follow normal distribution or not, this test is considered necessary in case testing hypotheses as most parametric Test stipulate data to be normality distributed.

Table (6.1) : Kolmogorov-Smirnov test

Field	Kolmogorov-Smirnov	
	Statistic	P-value
Evaluation of top management support	0.976	0.720
Evaluation of available financial resources	0.973	0.635
Evaluation of Human Resources Information system	0.973	0.619
Evaluation of HR measures reliability	0.968	0.477
Evaluation of Financial system used	0.949	0.055
All paragraphs of the questionnaire	0.991	0.996

As shown in Table (6.1) for Kolmogorov-Smirnov test of normality, the p-value for each field is greater than 0.05 level of significance, then the distribution for each field is normally distributed. Consequently, Parametric tests are used to perform the statistical data analysis.

6.3 Descriptive Analysis of the Sample Statistics

6.3.1 Place of Work

Table (6.2): Place of Work

Place of Work	Frequency	Percent
Coastal Municipalities Water Utility	99	51.0
Gaza Electricity distribution Company	95	49.0
Total	194	100.0

As shown in Table (6.2), the percentage of respondents of CMWU is higher than of GEDCo, and the total sample of respondents to the questionnaire were 194 respondents, that refers to that respondents in CMWU and GEDCo were very cooperative and have good awareness regarding helping in scientific researches.

6.3.2 Age group

Table (6.3):Age group

Age group	Frequency	Percent
Less than 25 years	15	7.7
from 25 - less than 35	72	37.1
from 35 - less than 45	54	27.8
from 45 - less than 55	39	20.1
from 55 – Above	14	7.2
Total	194	100.0

Table No.(6.3) shows that 7.7% of the sample are " Less than 25 years " , 37.1% of the sample are of " from 25 - less than 35", 27.8% of the sample are of " from 35 -less than 45",20.1% of the sample are of " from 45 - less than 55" and 7.2% of the sample are " from 55 – Above ". So this means that about 65% of the sample's age is from 25-45 years, this result indicates that the majority of employees working in both organizations are young professionals, so as to benefit from their enthusiasm and skills, also it shows that the investigated organizations are likely not to attract/keep older employees "from 55-above" otherwise, they recruit younger employees except for high positions because they should have both enough experience and knowledge to run the organizations effectively.

6.3.3 Gender

Table (6.4):Gender

Gender	Frequency	Percent
Male	155	79.9
Female	39	20.1
Total	194	100.0

Table No.(6.4) shows that 79.9% of the sample are Males and 20.1% of the sample are Females , which reflects that there's no balance between both respondents, the thing that indicates that semi public organizations prefer hiring male employees rather than female ones or that can be explained that males might seek job more than females,

also it reflects the governmental and semi public Palestinian work place reality. According to Palestinian central bureau of statistics PCBS 2010, indicators of the labor force in the Palestinian Territory shows that female participation rate in the Palestinian economy is 14.7% for females in 2010 compared with 15.5% in 2009 which is considered very low. While there is 66.8% for males in 2010 compared with 67.0% in 2009. Also it reflects a cultural issue that traditional companies prefer to employ men, and it can be because of the nature of the core business of those organizations. So male employees have better opportunity to work in these organizations.

6.3.2.3 Educational Level

Table (6.5):Educational Level

Educational Level	Frequency	Percent
Less than Secondary	4	2.1
Secondary Degree and less	18	9.3
Diploma	35	18.0
Bachelor Degree	123	63.4
Master Degree	12	6.2
PhD	2	1.0
Total	194	100.0

Table No.(6.5) shows that 63.4% of the respondents hold Bachelor Degree, followed by 18% holding Diploma, 9.3% holding Secondary Degree of less, 6.2% holding Master Degree, 2.1% holding "Less than Secondary Degree" and only 1% holding PhD. That indicates that the examined organizations are likely to attract employees holding Bachelor Degree, and that complies with the age of respondents, also it reflects that most of current employees are not interested in having higher studies once they had a job as they care more for getting the job.

6.3.2.4 Job Title

Table (6.6):Job Title

Job Title	Frequency	Percent
Director or above	6	3.1
Department Manager	27	13.9
Section Head	57	29.4
Unit Officer	26	13.4
Other technical job	21	10.8
Other Managerial Job	57	29.4
Total	194	100.0

Table (6.6) shows that (29.4%) of the respondents are Section Heads; (29.4%) have other managerial jobs; (13.9) are Department Managers; (13.4%) are Unit Officers; (10.8%) have other technical jobs; and the least percentage (3.1%) are Directors or above, which indicates that 17% of the respondents belong to top management level, that is important to measure top management support and understanding to HRA, as this level of management tends to have wider knowledge about the different managerial and financial systems to be used, and more involved in the organization's processes.

6.3.2.5 Years of Work in the Organization

Table (6.7): Years of Work in the Organization

Years of Work in the Organization	Frequency	Percent
Less than 2 years	18	9.3
From 2 - less than 5 years	66	34.0
From 5 - less than 10 years	48	24.7
From 10-less than 15 years	62	32.0
Total	194	100.0

Table (6.7) shows that most respondents (34%) spent "from 2- less than 5 years" in the organization; (32%) spent "from 10-less than 15 years"; (24.7%) spent "from 5 - less than 10 years"; and only (9.3%) spent "less than 2 years" in the organization.

So about 91% of employees have worked in the organization from 2-15 years.

This means that the majority of respondents have very good knowledge and experience in the organization, and accordingly, they can give accurate opinions about the hypotheses.

6.3.2.6 Years of Experience

Table (6.8): Years of Experience

Years of Experience	Frequency	Percent
Less than 5 years	40	20.6
From 5 - Less than 7 years	31	16.0
From 7 - Less than 10 years	23	11.9
From 10 - Less than 15 years	51	26.3
From 15 years - above	49	25.3
Total	194	100.0

Table (6.8) shows that most respondents (26.3%) have "from 10- less than 15 years" of experience; (25.3%) have "from 15 years- above"; (20.6%) have "less than 5

years"; (16%) have "From 5 - Less than 7 years"; and (11.9 %) have "From 7 - Less than 10 years". This indicates that about half the respondents (about 52%) are highly experienced employees have from 10-more than 15 years of experience, mostly from middle- top management, that gives more validity and adds more accuracy to the questionnaire results, and also more understanding to the HRA.

6.4 Data Analysis and Hypotheses Testing

In the following tables, the research uses a one sample t- test to examine the direction of respondents' response on the questions of the questionnaire and to test if the opinion of the respondents in the content of the sentences are positive (proportional mean greater than "60%" and the p-value less than 0.05) or the opinion of the respondent in the content of the sentences are neutral (p- value is greater than 0.05) or the opinion of the respondent in the content of the sentences are negative (proportional mean less than "60%" and the p-value less than 0.05).

6.4.1 The First Field: Management Support

Table (6.9): Means and Test values for “Evaluation of top management support”

No.	Item	Mean	Proprional mean (%)	Test value	P-value (Sig.)	Rank
1.	Top management has general understanding about the HRA	3.35	67.01	4.57	0.000*	2
2.	Top management has awareness on the importance of HRA application	3.35	66.94	4.57	0.000*	3
3.	Top management has got training in HRA	3.11	62.21	1.38	0.085	8
4.	Top management apply HRA in the institution	2.99	59.79	-0.13	0.448	11
5.	Top management uses HRA system in its employees-related decisions	3.09	61.88	1.13	0.130	9
6.	The institution considers employees as her most valuable assets	3.31	66.15	3.78	0.000*	4
7.	Employees turnover rate is considered relatively low compared to other institutions because they care more about keeping their effective employees	3.45	68.91	5.81	0.000*	1
8.	HRA system is designed depending on management expertise	3.23	64.69	3.24	0.001*	6
9.	HRA system is designed depending on specialized consultants assistance	3.24	64.79	3.01	0.001*	5
10.	Top management has awareness on employees performance appraisal importance in HRA application	3.21	64.19	2.69	0.004*	7
11.	Management gives high attention to using performance appraisal results in HRA	3.07	61.35	0.88	0.191	10
12.	The institution cares about providing employees with training courses in HRA	2.82	56.48	-2.14	0.017*	12
13.	Management makes promotion or bonus decisions based on HRA application results	2.60	52.08	-4.76	0.000*	14
14.	Management provide employees with awareness programs about valuing them as one of the institution assets	2.60	51.96	-5.08	0.000*	15
15.	Top management provides incentives to the employee based on his/her productivity and his financial value	2.75	54.95	-2.97	0.002*	13
All paragraphs of the field		3.08	61.57	1.41	0.080	

* The mean is significantly different from 3

Data Analysis

The majority of the respondents indicated that "Employees turnover rate is considered relatively low compared to other institutions because they care more about keeping their effective employees", this practice got 68.91% proportional mean.

The respondents' opinion to the following fields is positive as their proportional means is greater than 60% and the p-value less than 0.05; "Top management has awareness on the importance of HRA application", this practice got 66.94%.". "Top management has got training in HRA", this practice got 62.211%.". "The institution

considers employees as her most valuable assets", this practice got 66.15%.". "HRA system is designed depending on management expertise", this practice got 64.69%". "HRA system is designed depending on specialized consultants assistance", this practice got 64.79%". "Top management has awareness on employees performance appraisal importance in HRA application", this practice got 64.19%".

The respondents' opinion to the following fields is neutral as their p-value is greater than 0.05; "Top management uses HRA system in its employees-related decisions", this practice got 61.88%. "Management gives high attention to using performance appraisal results in HRA", this practice got 61.35%.". "Top management apply HRA in the institution", this practice got 59.79%".

The respondents' opinion to the following fields is negative as their proportional means is less than 60% and the p-value is less than 0.05; "The institution cares about providing employees with training courses in HRA", this practice got 56.48%". "Management makes promotion or bonus decisions based on HRA application results", this practice got 52.08%". "Management provide employees with awareness programs about valuing them as one of the institution assets", this practice got 51.96%." . "Top management provides incentives to the employee based on his/her productivity and his financial value", this practice got 54.95%.

The mean of the field "Evaluation of top management support" equals 3.08 (61.57%), Test-value = 1.41, and P-value=0.080 which is greater than the level of significance $\alpha = 0.05$. Then the mean of this field is insignificantly different from the hypothesized value 3. The researcher concludes that the respondents are (neutral) to field of "Evaluation of top management support".

Commentary

- a) Respondents seem to be neutral regarding the field of "Evaluation of top management support ", because they might be unaware of the HRA system and its application, as it is considered to be a new concept in the local organizations, also sometimes management has the fear of change as they are concerned about applying new systems, and they stick to the traditional (familiar) safer system, because they might lose control or affect they power.
- b) This result is consistent with the study of (Verma, Dewe, 2004), that can be concluded that respondents are uncertain about management support and their

understanding to HRA, which was one of the main barriers to applying HRA in traditional and public sector organizations. Also it highlights the importance of this requirement in the application of HRA, as HRA is a comprehensive system that requires the support from all parties so as to be applied effectively and successfully. Also it is consistent with the study of (Stovall, 2001) in that management support should exist strongly for HRA, the point that needs to be emphasized in the investigated organizations in this research.

- c) This result might be explained by the management fear of applying new system, or because it's a new concept to them, so they are concerned of how to apply it or whether it will affect their power or not.
- d) Respondents disagreed with the paragraph “Management provide employees with awareness programs about valuing them as one of the institution assets”, and this result is consistent with the study of (Verma, Dewe, 2004), in the knowledge intensive companies, that don't provide any programs for valuing employees, and they aren't persuaded by the benefits of applying HRA, which reflects the obvious lack of management support in this area.
- e) Respondents mostly agreed to the paragraph "Employees turnover rate is considered relatively low compared to other institutions because they care more about keeping their effective employees" which reflects the organizations' appreciation to their active and skilled employees, and that employees' performance appraisal is a key element in employees turnover, and this result is consistent with the study of (Lochhead, Stephens, 2004) that found that the employees' turnover was virtually absent or very low in the examined organizations even without setting a particular strategy to decrease turnover.

6.4.2 The Second field: Financial Resources Available

Table (6.10): Means and Test values for “Evaluation of available financial resources”

No	Item	Mean	Proportional mean (%)	Test value	P-value (Sig.)	Rank
1.	Your institution keeps an independent fund for the Human Resources Department	3.16	63.21	1.94	0.027*	1
2.	Your institution keeps a special fund for HRA system application	2.93	58.66	-0.87	0.193	6
3.	Your institution specializes a specified budget for employees training to raise their monetary value	3.08	61.66	0.99	0.161	3
4.	Future employment plans has a good budget to guarantee choosing the best and most value adding to the institution	3.11	62.28	1.53	0.064	2
5.	The budget specialized for applying HRA is enough for covering its cost such as financial bonuses or incentives	2.97	59.48	-0.34	0.368	5
6.	Your institution finances training programs in HRA major	2.79	55.88	-2.69	0.004*	7
7.	New projects that aim at raising employee's value are highly encouraged by your institution (such as job rotation, internal and external training courses, etc)	3.07	61.34	0.83	0.203	4
All paragraphs of the field		3.02	60.34	0.28	0.390	

* The mean is significantly different from 3

Data Analysis

The respondents' opinion to the following fields is positive as their proportional means is greater than 60% and the p-value less than 0.05; The majority of the respondents indicated that "Your institution keeps an independent fund for the Human Resources Department", this practice got 63.21% proportional mean. "Future employment plans has a good budget to guarantee choosing the best and most value adding to the institution", this practice got 62.28%."

The respondents' opinion to the following fields is neutral as their p-value greater than 0.05; "Your institution specializes a specified budget for employees training to raise their monetary value", this practice got 61.66%.". "New projects that aim at raising employee's value are highly encouraged by your institution (such as job rotation, internal and external training courses, etc)", this practice got 61.34% prportional mean. "The budget specialized for applying HRA is enough for covering its cost such as financial bonuses or incentives", this practice got 59.48%.". "Your institution keeps a special fund for HRA system application", this practice got 58.66%."

The respondents' opinion to the following field is negative as its proportional mean is less than 60% and the p-value is less than 0.05; "Your institution finances training programs in HRA major", this practice got 55.88%".

The mean of the field “Evaluation of available financial resources” equals 3.02 (60.34%), Test-value = 0.28, and P-value= 0.390 which is greater than the level of significance $\alpha = 0.05$. Then the mean of this field is insignificantly different from the hypothesized value 3. The researcher concludes that the respondents are (neutral) to field of “Evaluation of available financial resources”.

Commentary

- a) Respondents tend to be neutral to the total field of “Evaluation of available financial resources ”, which reflects the reality of most Palestinian work places prefer not to reveal their financial position nor statements, as they consider it confidential to the internal employees as well as to the public, and the fact that Palestinian organizations with critical financial situation don't take the risk of applying a new system. Also it reflects the employees' uncertainty regarding the financial resources available, however, it agrees that the investigated organizations care for human resource management and its related functions more than HRA, also it can be a result of the modernity of the HRA concept to the investigated organizations.
- b) This result disagrees the study of (Buhtoria, 2011) that discussed the valuation of human capital and concluded that organizations should give more attention and fund for constructing HRA system that complies with its policies and objectives, also it disagrees with the study of (Bane, 1998) that discusses Measuring the Cost of Human Resources Using The Positional Replacement Cost Method, and concluded the importance of disclosing financial information and specializing an annual fund for adopting HRA in the organization in case it is in a good financial position. However, the results agreed with the study of (Verma, Dewe, 2006) and the study of (Narayan, 2010) that it's not applicable for small and medium size organizations to apply HRA, as it has high cost, one of the reasons that prevent the measurement of human resources.
- c) The results in paragraph #2 and paragraph #5 are consistent with the study of (Alam, Kanti Deb, 2010), that discussed Human Resource Accounting Disclosure (HRAD) In Bangladesh as A Decisive Tool of Quality Assessment, and it

concluded that big organizations with very good financial resources are more motivated to apply HRA than smaller organizations with critical (bad) financial resources and position.

- d) Also it agrees with the study of (Al Mamun, 2009) which concluded that large size organizations with positive profitability are motivated to disclose more HRA information in their annual report to uphold their market value, and accordingly they are more willing to apply HRA. And since the investigated organizations have critical financial situation due to political circumstances and the uncertainty of the market place that affects its profitability and financial support to HRA, the thing that can be considered and concluded as one of the obstacles in applying and keeping an independent fund for HRA.

6.4.3 Third Field: Availability of Human Resources Information System

Table (6.11): Means and Test values for “Evaluation of Human Resources Information System”

No.	Item	Mean	Proportional mean (%)	Test value	P-value (Sig.)	Rank
1.	There's a complete database for the employees in the Human Resources Department that is used for in HRA	3.59	71.75	7.39	0.000*	4
2.	There's competencies and skills database required for each employee according to his job title and position	3.33	66.60	4.40	0.000*	7
3.	Human Resources Department updates employees' information regularly and continuously	3.64	72.77	8.40	0.000*	1
4.	There're clear systems and policies for career planning and job scale for all departments that clarifies each employee's career path in the institution	3.21	64.23	2.73	0.003*	9
5.	There's a unified comprehensive system that clarifies Human Resources policies	3.15	63.04	2.15	0.016*	11
6.	The employee's file (including his educational certificates, training, and performance appraisal results) affects HRA based decisions such as promotion, and salary annual increase	3.19	63.81	2.46	0.007*	10
7.	Information in the employee's file is comprehensive and enough for valuing the employee as an asset	3.35	66.94	4.93	0.000*	6
8.	The direct supervisor cooperates with Human Resources Department in valuing his/her employees as institution's assets	3.29	65.88	3.80	0.000*	8
9.	Calculating employee's value as an asset encourages him/her to improve and enrich his/her personal file and update his/her information at the Human Resources Department	3.62	72.47	8.00	0.000*	2
10.	An electronic system is used for collecting, storing employees' data and documents to reduce mistakes	3.59	71.86	8.35	0.000*	3
11.	There's a complete database for the employees in the Human Resources Department that is used for in HRA	3.41	68.25	5.37	0.000*	5
All paragraphs of the field		3.40	67.96	7.42	0.000*	

* The mean is significantly different from 3

Data Analysis

The respondents' opinion to the following fields is positive as their proportional means is greater than 60% and the p-value less than 0.05; The majority of the respondents indicated that "Human Resources Department updates employees' information regularly and continuously", this practice got 72.77% proportional mean.

"Calculating employee's value as an asset encourages him/her to improve and enrich his/her personal file and update his/her information at the Human Resources Department", this practice got 72.479%". "An electronic system is used for collecting, storing employees' data and documents to reduce mistakes", this practice got 71.86%.". "There's a complete database for the employees in the Human Resources Department that is used for in HRA", this practice got 68.25%". "There's competencies and skills database required for each employee according to his job title and position", this practice got 66.60%". "Information in the employee's file is comprehensive and enough for valuing the employee as an asset", this practice got 66.94%.". "The direct supervisor cooperates with Human Resources Department in valuing his/her employees as institution's assets", this practice got 65.88%". "There're clear systems and policies for career planning and job scale for all departments that clarifies each employee's career path in the institution", this practice got 64.23%.". "There's a unified comprehensive system that clarifies Human Resources policies", this practice got 63.04%". "The employee's file (including his educational certificates, training, and performance appraisal results) affects HRA based decisions such as promotion, and salary annual increase", this practice got 63.81%".

The mean of the field “Evaluation of Human Resources Information system” equals 3.40 (67.96%), Test-value = 7.42, and P-value=0.000 which is smaller than the level of significance $\alpha = 0.05$. The sign of the test is positive, so the mean of this field is significantly greater than the hypothesized value 3. The researcher concludes that the respondents agreed to field of “Evaluation of Human Resources Information system”.

Commentary

- a) The mentioned result indicates that respondents in CMWU and GEDCo agree in an acceptable way to the field of “Evaluation of Human Resources Information system”, which means that those organizations have a good database of human resources information. However, it needs some improvements, enrichments, and updates to be able to act as a basis for applying HRA in those organizations. This also reflects that the human resources departments in the investigated organizations have a good vision about their work and maintain the fundamentals for any system to be applied. HRIS is a multifunctional tool that is a must for

HRA application, so we can conclude that CMWU and GEDCo have only the base of this vital HRA requirement.

- b) This result agrees with the study of (Al Mamun, 2009) which discusses HRA disclosure of Bangladesh companies and its association with corporate characteristics and it concluded that human resources information availability is very important factor to applying HRA, because the information resulted of HRA is very important to insider and outsider decision makers.
- c) Also this result agreed with the study of (Pehkonen, 2000), who also emphasized the importance of human resources information system in HRA application.

6.4.4 Fourth Field: HR Measures Reliability

Table (6.12): Means and Test values for “Evaluation of HR measures reliability”

No.	Item	Mean	Proportional mean (%)	Test value	P-value (Sig.)	Rank
1.	Human Resources Department has enough expertise and knowledge to perform proper performance appraisal	3.39	67.81	4.91	0.000*	2
2.	Performance appraisal is done on a regular basis for employees	3.64	72.85	8.45	0.000*	1
3.	High attention is given for employees' performance appraisal results	3.20	64.06	2.35	0.010*	3
4.	Employees' performance appraisal results occupy the highest weight in valuing employees as assets	3.06	61.14	0.75	0.226	7
5.	Human Resources Department has an expert team with qualification and enough knowledge to manage change and perform HRA	3.13	62.53	1.58	0.058	4
6.	There's a clear plan for applying HRA	2.94	58.75	-0.81	0.210	11
7.	Human Resources Department provides employees with training courses to deal with new systems	3.07	61.35	0.87	0.193	6
8.	Human Resources Department evaluates every training course provided for employees	3.08	61.56	0.99	0.161	5
9.	Employees' performance are reevaluated after any training course or developmental program	2.94	58.85	-0.72	0.235	10
10.	HR Department team initiate with employees' awareness regarding any new system	2.96	59.27	-0.48	0.315	9
11.	There's a succession planning for top management future vacancies	3.02	60.31	0.19	0.424	8
12.	The institution strives to maintain a fair internal system that equals between required job duties and salary paid	2.86	57.29	-1.52	0.065	12
	All paragraphs of the field	3.11	62.15	1.83	0.034*	

* The mean is significantly different from 3

Data Analysis

The respondents' opinion to the following fields is positive as their proportional means is greater than 60% and the p-value less than 0.05; The majority of the respondents indicated that "Performance appraisal is done on a regular basis for employees", this practice got 72.85% proportional mean. Human Resources Department has enough expertise and knowledge to perform proper performance appraisal", this practice got 67.81%. "High attention is given for employees' performance appraisal results", this practice got 64.06%".

The respondents' opinion to the following fields is neutral as their p-value less than 0.05; "Human Resources Department has an expert team with qualification and enough knowledge to manage change and perform HRA", this practice got 62.53%". "Employees' performance appraisal results occupy the highest weight in valuing employees as assets", this practice got 61.14%". "Human Resources Department provides employees with training courses to deal with new systems", this practice got 61.35%". "Human Resources Department evaluates every training course provided for employees", this practice got 61.56%". "There's a succession planning for top management future vacancies", this practice got 60.31%". "There's a clear plan for applying HRA", this practice got 58.75%". "Employees' performance are reevaluated after any training course or developmental program", this practice got 58.85%". "HR Department team initiate with employees' awareness regarding any new system", this practice got 59.27%". "The institution strives to maintain a fair internal system that equals between required job duties and salary paid", this practice got 57.29%".

The mean of the field "Evaluation of HR measures reliability" equals 3.11 (62.15%), Test-value = 1.83, and P-value=0.034 which is smaller than the level of significance $\alpha = 0.05$. The sign of the test is positive, so the mean of this field is significantly greater than the hypothesized value 3. The researcher concludes that the respondents agreed to field of "Evaluation of HR measures reliability"

Commentary

a) Although respondents agreed to the field of "Evaluation of HR measures reliability", still we can't consider that the human resources measures are totally trusted by employees, and that they are perfect and fair to measure HR value, because it is a very weak agreement. that also carries the possibility that respondents are suspicious towards the reliability of the HR measures, and it's not

comprehensive enough to measure HR value effectively, and respondents suspected the initiative role of the human resources departments providing awareness programs and follow up to activities. But it also indicates that major semi public organizations care for giving human resources department a sensible role to implement its functions as much as it could.

- b) The results agreed with the study of (Rowbottom, 1998) that discussed Intangible Asset Accounting and Accounting Policy Selection in the Football Industry who concluded that the development of reliable measurement systems will facilitate the recognition of intangible assets.
- c) The results came to emphasize the results of the study of (Lee, 2008); which discussed the awareness and recording of human resource value in the financial statements of the Malaysian organizations, he concluded that measuring of human resource value with high reliability creates a sense of belonging in the employees' minds towards the organization and this eventually will increase productivity and it enables managers to identify the investment of the human resources and the job requirement of employees.
- d) It also agrees with the study of (Verma, Dewe, 2006), it discussed Valuing Human Resources in UK organizations, it emphasized the importance of human resources measurement reliability as a key requirement to apply HRA, and that failing to have a reliable measurement threaten the success of HRA application.
- e) We can conclude that the CMWU and GEDCo have the initial (one of the HRA requirements) to apply HRA as they appear to have a reliable human resources measurements according to the respondents answers and the statistical results.

6.4.5 Fifth Field: Accounting System Used

Table (6.13): Means and Test values for “Evaluation of Financial system used”

No.	Item	Mean	Proportional mean (%)	Test value	P-value (Sig.)	Rank
1.	Financial system used has the ability to calculate Human Resources value	3.24	64.74	3.16	0.001*	1
2.	Financial system used contributes in calculating Human Resources value	3.13	62.51	1.70	0.046*	2
3.	There's an internal audit on Human Resources value calculation	3.04	60.73	0.49	0.311	6
4.	Accurate information and values can result from the financial system used regarding HRA	3.12	62.40	1.59	0.057	4
5.	The financial system used can be developed d to serve new systems application for Human Resources Department	3.12	62.41	1.60	0.056	3
6.	Financial reports produced by the financial system used that calculate HR value have a great impact on top management and Board of Directors decision making	3.06	61.15	0.66	0.255	5
All paragraphs of the field		3.12	62.31	1.80	0.037*	

* The mean is significantly different from 3

Data Analysis

The respondents' opinion to the following fields is positive as their proportional means is greater than 60% and the p-value less than 0.05; The majority of the respondents indicated that " Financial system used has the ability to calculate Human Resources value", this practice got 64.74% proportional mean. "Financial system used contributes in calculating Human Resources value", this practice got 62.51%".

The respondents' opinion to the following fields is neutral as their p-value less than 0.05; "Accurate information and values can result from the financial system used regarding HRA", this practice got 62.40%". "The financial system used can be developed to serve new systems application for Human Resources Department", this practice got 62.41%". "There's an internal audit on Human Resources value calculation", this practice got 60.73%". "Financial reports produced by the financial system used that calculate HR value have a great impact on top management and Board of Directors decision making", this practice got 61.15%".

The mean of the field “Evaluation of Financial system used” equals 3.12 (62.31%), Test-value = 1.80, and P-value=0.037 which is smaller than the level of

significance $\alpha = 0.05$. The sign of the test is positive, so the mean of this field is significantly greater than the hypothesized value 3. The researcher concludes that the respondents agreed to field of “Evaluation of Financial system used ”.

Commentary

- a) Respondents from both CMWU and GEDCo agreed acceptably on most of the fields of “Evaluation of Financial system used”, which means that the financial systems used in CMWU and GEDCo are somehow capable of performing multi new functions and can be developed and improved to be able to apply HRA effectively, also it proves the reality of most traditional semi public organizations worldwide that depend mostly on their financial statements and the financial reports in their decision making process more than counting on the managerial reports. However, this result gives more optimistic vision on applying HRA in the investigated organizations (CMWU and GEDCo) in this research if they could develop their accounting financial system and give it the flexibility and ability to adopt HRA, because HRA requires a mature financial system, as well as, professional accountants and reliable financial department that can understand and adopt the HRA system and disclose the HR measures in its financial statements.
- b) This result agreed with the study of (Inyang, 2010) which discussed Strategic Human Resource Management, and he stated that in order to achieve and maintain a human competitive advantage, the company must have an effective financial department that well understands the business goals and how to measure human resources, the thing that is considered of high importance to HRA, and in this research, respondents agreed that the organizations use good financial system with high capabilities.
- c) Also this result agreed with the study of (Verma, Dewe, 2004) and the study of (Okpala, Chidi, 2010), in that the financial systems used in knowledge based and private organizations are capable for valuing human resources. However, its disagrees with the case of traditional and public sector organizations in the study of (Verma, Dewe, 2004), which was found that the financial systems used are considered obstacles in applying HRA.

6.4.6 Mean of all fields

Table (6.14): Means and Test values for “All paragraphs”

Item	Mean	Proportional mean (%)	Test value	P-value (Sig.)	Rank
Evaluation of Top Management Support	3.08	61.57	1.41	0.080	4
Evaluation of Available Financial Resources	3.02	60.34	0.28	0.390	5
Evaluation of HR Information System	3.40	67.96	7.42	0.000*	1
Evaluation of HR Measures Reliability	3.11	62.15	1.83	0.034*	3
Evaluation of Financial System Used	3.12	62.31	1.80	0.037*	2
All paragraphs	3.15	63.00	2.98	0.002*	

*The mean is significantly different from 3

Data Analysis

The mean for all paragraphs in the questionnaire equals 3.15 (63.00%), Test-value =2.98 and P-value=0.002 which is smaller than the level of significance $\alpha = 0.05$. The sign of the test is positive, so the mean for all paragraphs in the questionnaire is significantly greater than the hypothesized value 3. *The researcher concludes that the respondents agreed to all paragraphs.*

Commentary

Finally, The total result indicates that the investigated organizations in this research (CMWU and GEDCo) have good opportunity and good environment to adopt HRA system and start valuing their employees, this especially appears in the fields of (evaluation of HRIS, evaluation of financial systems used, evaluation of HR measures reliability), as respondents agreed to the mentioned fields, and that act as a base of the HRA application's requirements. Other fields such as (evaluation of management support, and evaluation of available financial resources) need more focus and improvement, because without them, HRA wouldn't be applied successfully, also more awareness campaigns and training programs should be implemented to develop HRA in major semi public organizations in Gaza Strip. Also it appears that HRA is still considered as a new unfamiliar concept to some organizations, although they believe in the human resources as an asset and a profitable tool.

6.4.7 Mention Your level of satisfaction with calculating your value as an asset of the organization

Table (6.15)

N	Frequency	Percent
1	16	8.9
2	14	7.8
3	19	10.6
4	19	10.6
5	36	20.0
6	31	17.2
7	30	16.7
8	7	3.9
9	5	2.8
10	3	1.7
Total	180	100.0

Table (6.16): Means and Test values

Paragraph	Mean	Proportional mean (%)	Test value	P-value (Sig.)
Mention Your level of satisfaction with calculating your value as an asset of the organization	4.91	49.11	-6.726	0.000*

The mean for "Mention Your level of satisfaction with calculating your value as an asset of the organization" equals 4.91 (49.11%), Test-value = -6.726 and P-value=0.000 which is smaller than the level of significance $\alpha = 0.05$. The sign of the test is negative, so the mean of this paragraph is significantly smaller than the hypothesized value 6. The researcher concludes that the respondents disagreed to this paragraph.

Commentary

This result indicates that at the moment most employees are frustrated and unsatisfied with valuing them as assets in the organization due to not applying HRA, and this area needs some focus and improvement to increase employees satisfaction, and make them feel their importance to the organization, that can be reflected on their productivity.

6. There is a significant difference (at the level 0.05 level) in the HRA application, due to socio-demographic variables (gender, education, age, experience, marital status, and employment period).

6.1 There is a significant difference (at the level 0.05 level) in the HRA application, due to socio-demographic variables (Name of Organization).

Table (6.17): Independent Samples T-Test of the fields and their p-values for Name of Organization

No	Field	Test value	P-value(Sig.)
1.	Evaluation of top management support	2.339	0.020*
2.	Evaluation of available financial resources	0.977	0.330
3.	Evaluation of Human Resources Information system	2.657	0.009*
4.	Evaluation of HR measures reliability	0.352	0.725
5.	Evaluation of Financial system used	2.955	0.004*
	All fields together	2.031	0.044*

* The mean difference is significant a 0,05 level

Data Analysis

Table (6.17) shows that the p-value (Sig.) is smaller than the level of significance $\alpha = 0.05$ for the fields “Evaluation of top management support, Evaluation of Human Resources Information system, Evaluation of Financial system used and all fields together”, then there is significant difference in respondents' answers toward these fields due to Name of Organization. The researcher concludes that the characteristic of the Name of Organization has an effect on these fields. Also, it shows that the p-value (Sig.) is greater than the level of significance $\alpha = 0.05$ for the other fields, then there is insignificant difference in respondents' answers toward these fields due to Name of Organization. The researcher concludes that the characteristic of the Name of Organization has no effect on these fields.

Commentary

The researcher concludes that the name of organization whether it's GEDCo or CMWU has an effect on all the fields investigated in this research, and it had a strong relation to the answers of all the questionnaire fields except for the "Evaluation of HR measures reliability", and " Evaluation of available financial resources".

Table (6.18): Mean for each field of Name of Organization

No	Field	Means	
		Coastal Municipalities Water Utility	Gaza Electricity Distribution Company
1.	Evaluation of top management support	3.204	2.947
2.	Evaluation of available financial resources	3.075	2.956
3.	Evaluation of Human Resources Information system	3.536	3.254
4.	Evaluation of HR measures reliability	3.128	3.087
5.	Evaluation of Financial system used	3.299	2.928
	All fields together	3.250	3.046

Data Analysis

Table (6.18) shows the mean for each field for Name of Organization.

For all fields together, the mean for respondents with Name of Organization of Coastal Municipalities Water Utility is higher than Gaza Electricity distribution Company.

Commentary

The mean for respondents with Name of Organization has differed for each field of this research, as mean respondents from CMWU has been greater than respondents from GEDCo in all the fields except for the field " Evaluation of Financial system used", which means that CMWU has more potential to apply HRA and has more adopting environment for it than GEDCo as it has more HRA requirements according to the respondents' answers of the questionnaire, however, it appears that GEDCo has better financial system than CMWU which helps in applying HRA, so CMWU should improve its financial system to be more responding and flexible to adopt HRA.

6.2 There is a significant difference (at the level 0.05 level) in the HRA application, due to socio-demographic variables (age).

Table (6.19): ANOVA test of the fields and their p-values for age

No	Field	Test Value	P-value(Sig.)
1.	Evaluation of top management support	0.840	0.501
2.	Evaluation of available financial resources	0.124	0.974
3.	Evaluation of Human Resources Information system	0.032	0.998
4.	Evaluation of HR measures reliability	0.825	0.511
5.	Evaluation of Financial system used	0.494	0.740
	All fields together	0.325	0.861

Data Analysis

Table (6.19) shows that the p-value (Sig.) is greater than the level of significance $\alpha = 0.05$ for each field, then there is insignificant difference in respondents' answers toward each field due to age. The researcher concludes that the characteristic of the respondents' age has no effect on each field.

Commentary

Since the respondents' age has no effect on the fields investigated, it is concluded that all respondents with their different ages have almost the same opinions about the application of HRA in CMWU and GEDCo.

6.3 There is a significant difference (at the level 0.05 level) in the HRA application, due to socio-demographic variables (gender).

Table (6.20): Independent Samples T-Test of the fields and their p-values for gender

No	Field	Test value	P-value(Sig.)
1.	Evaluation of top management support	-0.746	0.457
2.	Evaluation of available financial resources	-0.886	0.377
3.	Evaluation of Human Resources Information system	-0.205	0.838
4.	Evaluation of HR measures reliability	-1.601	0.111
5.	Evaluation of Financial system used	-0.236	0.813
	All fields together	-0.920	0.359

Data Analysis

Table (6.20) shows that the p-value (Sig.) is greater than the level of significance $\alpha = 0.05$ for each field, then there is insignificant difference in respondents' answers toward each field due to gender. The researcher concludes that the characteristic of the gender no effect has on each field.

Commentary

Since gender has no effect on all fields on the questionnaire, it is concluded that opinions were the same from both male and female employees towards the application of HRA, although the number of male respondents is bigger than the number of female respondents.

6.4 There is a significant difference (at the level 0.05 level) in the HRA application, due to socio-demographic variables (education).

Table (6.21): ANOVA test of the fields and their p-values for education

No	Field	Test Value	P-value(Sig.)
1.	Evaluation of top management support	1.554	0.202
2.	Evaluation of available financial resources	0.844	0.471
3.	Evaluation of Human Resources Information system	1.032	0.380
4.	Evaluation of HR measures reliability	0.425	0.735
5.	Evaluation of Financial system used	1.066	0.365
	All fields together	1.051	0.371

Data Analysis

Table (6.21) shows that the p-value (Sig.) is greater than the level of significance $\alpha = 0.05$ for each field, then there is insignificant difference in respondents' answers toward each field due to education. The researcher concludes that the characteristic of the respondents education has no effect on each field.

Commentary

Education of respondents didn't affect any field of the research, because almost all respondents have good education level as the researcher excluded the operational level and employees with less than secondary educational level so as to have accurate results towards the assessment of HRA application in CMWU and GEDCo.

6.5 There is a significant difference (at the level 0.05 level) in the HRA application, due to socio-demographic variables (Job Title).

Table (6.22): ANOVA test of the fields and their p-values for Job Title

No	Field	Test Value	P-value(Sig.)
1.	Evaluation of top management support	2.558	0.029*
2.	Evaluation of available financial resources	3.309	0.007*
3.	Evaluation of Human Resources Information system	2.634	0.025*
4.	Evaluation of HR measures reliability	1.395	0.228
5.	Evaluation of Financial system used	2.853	0.017*
	All fields together	2.861	0.016*

* The mean difference is significant a 0,05 level

Data Analysis

Table (6.22) shows that the p-value (Sig.) is greater than the level of significance $\alpha = 0.05$ for the field “Evaluation of HR measures reliability”, then there is insignificant difference in respondents' answers toward this field due to Job Title. The researcher concludes that the characteristic of the Job Title no effect on this field. It also shows that the p-value (Sig.) is smaller than the level of significance $\alpha = 0.05$ for the other fields, then there is significant difference in respondents' answers toward these fields due to Job Title. The researcher concludes that the characteristic of the Job Title has an effect on these fields.

Commentary

According to the above result that respondents' job title has an effect on the total fields, this is due to the reality that the employee's job title do have effects on the way he/she assess any situation, also information revealed about the organization to employees differs according to his/her job title, which might explains the reason for this effect in this research. While respondents' job titles don't have any effect on the evaluation of human resources measures reliability that can be explained with the certainty of respondents' opinions towards this field regardless of their job titles, this might be due to the popularity of this field.

Table (6.23) shows the mean for each field for Job Title.

Table (6.23): Mean for each field of Job Title

No	Field	Means					
		Director or above	Department Manager	Section Head	Unit Officer	Other technical job	Other Managerial Job
1.	Evaluation of top management support	2.656	2.736	3.113	3.122	3.457	3.091
2.	Evaluation of available financial resources	2.667	2.725	3.065	2.908	3.619	2.972
3.	Evaluation of Human Resources Information system	2.773	3.354	3.432	3.442	3.818	3.277
4.	Evaluation of HR measures reliability	2.861	2.898	3.148	3.200	3.445	3.027
5.	Evaluation of Financial system used	2.556	2.836	3.158	3.127	3.682	3.060
	All fields together	2.719	2.918	3.190	3.172	3.581	3.097

For all fields together, the mean for respondents with Job Title of Other technical job is higher than other Job Title groups.

Commentary

The majority of respondents who affected the questionnaire fields results are having technical jobs, and this is explained by the nature of the semi public organizations investigated CMWU and GEDCo, as most of the jobs within these organizations are technical, because it's their core business, also technical employees are more powerful than others in managerial jobs in these organizations in decision making.

6.6 There is a significant difference (at the level 0.05 level) in the HRA application, due to socio-demographic variables (Years of work in the Organization).

Table (6.24): ANOVA test of the fields and their p-values for Years of work in the Organization

No	Field	Test Value	P-value(Sig.)
1.	Evaluation of top management support	2.037	0.110
2.	Evaluation of available financial resources	0.107	0.956
3.	Evaluation of Human Resources Information system	1.412	0.241
4.	Evaluation of HR measures reliability	1.095	0.353
5.	Evaluation of Financial system used	0.582	0.628
	All fields together	1.131	0.338

Data Analysis

Table (6.24) shows that the p-value (Sig.) is greater than the level of significance $\alpha = 0.05$ for each field, then there is insignificant difference in respondents' answers toward each field due to Years of work in the Organization. The researcher concludes that the characteristic of the respondents Years of work in the Organization has no effect on each field.

Commentary

Respondent's years of work in the organization has no effect on their answers to any field in the questionnaire which indicates that assessment of HRA application doesn't require a long time of service in the organization.

6.7 There is a significant difference (at the level 0.05 level) in the HRA application, due to socio-demographic variables (Years of Experience).

Table (6.25): ANOVA test of the fields and their p-values for Years of Experience

No	Field	Test value	P-value(Sig.)
1.	Evaluation of top management support	1.463	0.215
2.	Evaluation of available financial resources	1.680	0.156
3.	Evaluation of Human Resources Information system	1.456	0.217
4.	Evaluation of HR measures reliability	4.498	0.002*
5.	Evaluation of Financial system used	2.804	0.027*
	All fields together	2.634	0.036*

* The mean difference is significant a 0,05 level

Table (6.25) shows that the p-value (Sig.) is smaller than the level of significance $\alpha = 0.05$ for the fields “Evaluation of HR measures reliability, Evaluation of Financial system used and all fields together”, then there is significant difference in respondents' answers toward these fields due to Years of Experience. The researcher concludes that the characteristic of the Years of Experience has an effect on these fields. It also shows that the p-value (Sig.) is greater than the level of significance $\alpha = 0.05$ for the other fields, then there is insignificant difference in respondents' answers toward these fields due to Years of Experience. The researcher concludes that the characteristic of the Years of Experience has no effect on these fields.

Commentary

In this field years of experience of the respondents affected some fields and not others, according to the statistical results it has effect on “Evaluation of HR measures reliability, Evaluation of Financial system used and all fields together”, this might be a result of that assessing these fields requires not only education, or job title, but also good years of experience in order to well assess them. But other fields such as "Evaluation of top management support, Evaluation of available financial resources, Evaluation of Human Resources Information system" can be assessed regardless of the years of the experience of the respondent.

Table (6.26) shows the mean for each field for Years of Experience.

Table (6.26): Mean for each field of Years of Experience

No	Field	Means				
		Less than 5 year	From 5 - Less than 7 years	From 7 - Less than 10 years	From 10 - Less than 15 years	From 15 years - above
1.	Evaluation of top management support	3.300	2.971	3.209	3.010	2.976
2.	Evaluation of available financial resources	3.167	2.783	3.298	2.993	2.936
3.	Evaluation of Human Resources Information system	3.559	3.222	3.543	3.282	3.431
4.	Evaluation of HR measures reliability	3.352	2.867	3.566	3.050	2.901
5.	Evaluation of Financial system used	3.398	2.802	3.372	2.990	3.085
	All fields together	3.361	2.952	3.397	3.075	3.066

For all fields together, the mean for respondents with Years of Experience of "From 7 - Less than 10 years" is higher than other Years of Experience groups.

Commentary

This result indicates that respondents who have from 7- less than 10 years of experience affected the results of the fields more than other years of experience groups, this might be due to the organizations' policy that tend to keep older employees with more experience and reducing employees turnover, the thing that makes this key staff more influencing and knowledgeable than others.

Chapter Seven

Conclusion and Recommendations

7.1 Introduction

7.2 Conclusion

7.3 Recommendations

7.4 Suggested Topics for Future Studies

7.1 Introduction

This chapter lists the conclusions, findings of this research, some recommendations based on these findings, and suggestions for future researches in order to improve HRA application in Gaza Strip.

7.2 Conclusions

The main objective of this research is to assess the HRA application in CMWU and GEDCo. It is hoped that this research will provide a reference to management in Palestinian semi-public organizations to implement HRA effectively in order to improve decision making process, and enhance their employees' performance through valuing them as one of the most profitable and important organization's assets.

Accordingly, the HRA requirements were investigated and discussed in CMWU and GEDCo so as to assess how far can HRA be applied in those organizations. Evidence was provided that there is a strong relation between (human resources information system, financial system used, HR measures reliability) and the application of HRA in the investigated organizations.

The overall conclusion that can be drawn out of this research is that although there's no doubt that HRA is a new concept which is considered very new to most respondents and generally to the Palestinian working sectors, it is found that the investigated organizations have some basic requirements for applying HRA, but still there's no focus on the monetary valuing of employees, nor using it in their decision making. The result isn't pessimistic as it seems, because the Palestinian market and work sectors are considered in a very primitive stage compared to other countries.

The lack of significant results from several hypotheses may be interpreted as suggesting that the existing theories used to generate the hypotheses are not applicable to the semi-public organizations in Gaza Strip and contain fundamental limitations which mean that they are not universally relevant.

The following is a summary of the conclusions that can be drawn from this study:

7.2.1 Conclusion about management support and HRA

- a) Respondents are suspicious about management support for HRA application, as it might not be good enough to be applied effectively, as HRA is a new concept that may not be accepted by everyone.
- b) CMWU and GEDCo have low turnover rate as they care about maintaining qualified employees and they consider employees their most valuable asset, consequently, employees feel secure within those organizations.
- c) The investigated organizations have general knowledge and awareness about HRA, but still Palestinian semi public organizations in Gaza strip lack experience and knowledge about HRA and it's not applied in the investigated organizations.
- d) Top management doesn't rely on HRA system in its employees' related decisions
- e) The possible reason for that management support isn't good enough for HRA as mentioned by respondents is the closed Palestinian community, that fear of any new changes or the fear to lose power if new system is applied.
- f) Training courses and HRA awareness programs offered to employees have low priority given by management.

7.2.3 Conclusion about financial resources available and HRA

- a) The research statistical results indicated that the available financial resources at CMWU and GEDCo cannot afford the cost of HRA application, because the system requires high cost while the profit collection in the investigated organizations is very low due to the current situation in Gaza Strip, as well as, the high operational costs of those organizations, that, unfortunately, makes HRA or any other new system to be their least priority.
- b) The investigated organizations believe in the importance of HR Department through specifying a special budget to finance its activities.
- c) The recruitment process have a good attention and budget by management in order to choose the best value adding employees.
- d) Financially, there's a clear neglect of keeping a special budget for HRA application nor its training in the investigated organizations and that might be due to low financial resources

7.2.4 Conclusion about Human Resources Information System and HRA

- a) CMWU and GEDCo have the HRA requirement of a comprehensive HRIS weakly, as it still needs more updates and improvement, this appeared from the weak agreement by the respondents towards this requirement existence.
- b) The HR Department at the investigated organizations care about updating employees data regularly.
- c) The investigated organizations use electronic systems to store and update the employees' information, which decrease mistakes' opportunities, and give more security and confidentiality control to the information.
- d) HRIS is used in salary calculation, any promotion or incentives, any nomination.

7.2.5 Conclusion about HR measures reliability and HRA

- a) The reliability of HR measures in the investigated organizations can be considered to be moderately accepted, it guarantees some integrity and fairness in the valuing of human resources process, but since the proportional mean of respondents' answers isn't good enough, this area still needs more development, activities, and effort to improve it to ensure the maximum level of fairness. But still this result is considered to be somehow optimistic.
- b) HR Department performs performance appraisal process regularly to the employees and its results are highly taken into consideration.
- c) HR Department have a multi-functional team that is qualified enough to perform its different functions.
- d) Respondents are suspicious if there's a succession planning for future top management vacancies, this might be because they are not involved in the process and because these positions are very sensitive and requires high level of confidentiality
- e) Few training courses are given to employees to be aware of new systems.
- f) HR Department lacks follow up for its activities and re-evaluating them.

7.2.6 Conclusion about financial system used and HRA

- a) Respondents have weakly agreed that the financial system used is qualified enough to perform HRA calculations and other systems developed by HR Department, perhaps because it is used to perform the traditional familiar

accounting work, and not adopted to embrace new complicated systems such as HRA.

- b) However, the financial system used develops accurate reports and calculations regarding the activities it performs. But since most of the calculations of valuing the human resources is done using the financial system, it is highly recommended to be deeply developed and improved to have the flexibility to include everything needed to apply the suitable HRA model.

7.2.7 Conclusion about the sample characteristics

- a) The majority of respondents to the questionnaire were males, working as section heads, have from 10-less than 15 years of experience, and they spent from 2- less than 5 years in the organization.
- b) The personal characteristics of respondents had no effect on the research fields except for the job title characteristic, that had an effect on the results especially from respondents working in other technical jobs.
- c) Accordingly, it is supposed that the research has got accurate results regarding HRA application assessment in the investigated organizations.

Most organizations are aware that employees are their greatest assets and that they are the driving force behind the future success of any organization. In Palestine, the concept of human resource recording is still very immature.

7.3 Recommendations

The researcher suggests the following recommendations based on the findings of the research:

- a) It is important for semi public organizations in Palestine to take steps to assess and present the value of their human resources even though HRA is not a popular concept, as it is a well accepted concept elsewhere which could add a competitive edge to these organizations.
- b) CMWU and GEDCo have some initials for HRA application, however, they need to improve some of their systems such as the financial system they use, the HRIS, in order adopt the HRA system effectively through their systems.
- g) Management at CMWU and GEDCo need more awareness campaigns about HRA, and its benefits, so they can give the suitable support for it, because this can

give management more encouragement and acceptance to the HRA and consequently they can provide the suitable support and commitment, because decision makers have to be convinced about the need of applying any new system in order to provide the concerned parties with more facilities and flexibility needed for its application.

- c) Training should be given to employees as a prior practice for applying HRA, and they should have a pilot testing to see how much it matches, because each organization has its own unique circumstances that requires some changes in the system to match perfectly, also employees have to try the system themselves in order to discuss, add their comments, and have the full knowledge about it to be ready for effective application.
- d) HRA can be used for decision making process that is related to employees, such as downsizing, promotions, ... etc. So management should consider benefiting from this in making decisions with high integrity, because it puts a similar criteria to all employees that gives the process high level of fairness, also it raises the level of management trust by employees, as well as the level of productivity.
- e) Semi public organizations can mostly benefit from HRA if they used it to create their competitive advantage through their current employees, as they work as service providers in addition to implementing projects, and they have big contact with public, which increase the level of productivity of these organizations.
- f) Semi-public organizations in Gaza Strip still suffer from the effect of bureaucracy system that didn't change up till now, it needs a great effort for this cultural change, in order to utilize modern systems to achieve their goals more effectively and with the lease efforts.
- g) Management should consider the investment of HRA and change the traditional look for them as expenses in the balance sheet. Accordingly, the amount of investment made in the Human Resources and its value can be utilized by the Human Resources management personnel to determine how far the investment in Human Resources is utilized by the management in producing income for the organization.
- h) The process of HRA measurement can influence management to think in terms of investment in the company's human resources as increasing the value of human capital or human assets that will provide future benefits to the company, rather than in terms of expenses.

- i) Excellent financial resources must be available for HRA to be applied effectively, along with strong multifunctional team to monitor and follow up the progress, because every system is exposed to failure without continuous follow up, assessment, and development.
- j) The investigated organizations should consider exploring new ways for increasing their profit and improve collection, in order to keep good financial resources to adopt new systems that can improve employees' performance and the organization's as a whole.
- k) Finally, unfortunately, it is not recommended for the investigated organizations to apply HRA at the current time, as they still lack some of the main requirements, and it might be costly for them and due to the previous reason, it ends by failure, so first, they have to set goals of HRA, make cultural change and accept new systems, second, they have to improve the current systems they use to adopt the changes they need to adopt, third, pilot training and awareness campaigns should be given to all concerned parties, fourth, after implementing HRA, follow up and evaluation is necessary, to be sure of the suitability of the used model and accuracy of information.

7.4 Suggested Topics for Future Studies

There are some related topics that can be investigated in the future by interested researchers, which are:

- a) Investigating the effect of HRA on decision making process in Palestinian private organizations.
- b) Investigating the reasons of reluctant attitude of listed semi public organizations in Gaza Strip to disclose the HRA information. Moreover, the scope of the research may be extended by increasing the sample size and cross-industry examination.
- c) Investigating which model for recording of human resource value is most suited to the Palestinian context.
- d) Investigating how the users of financial statements can be educated about the usefulness of measuring human resource value and create more awareness.
- e) Exploring the implications of models that account for knowledge employees as intellectual property (as assets) rather than a financial expense.

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7.7 Appendices

APPENDIX (A)

List of Referees Names and Place of Work

No.	Referee	Place of Work
1.	Dr. Yousef Bahar	Islamic University
2.	Dr. Rushdy Wady	Islamic University
3.	Dr. Akram Samour	Islamic University
4.	Dr. Nehaya Al Telbani	Al Azhar University
5.	Dr. Mohammed Fares	Al Azhar University
6.	Dr. Mohammed Al Agha	Al Azhar University
7.	Dr. Bassam Abu Hamad	Al-Quds University
8.	Mr. Ashraf Al Ashy	Coastal Municipalities Water Utility
9.	Dr. Samir Safi	Islamic University

B. English Questionnaire

Islamic University
College of Commerce
Business Administrative



By the name of Allah the most Gracious the most Merciful

Dear Sir/Madam,

The attached questionnaire is a study tool for partial completion of Master Degree in Business Administration requirements, entitled "The Assessment of Human Resources Accounting in Major Semi- Public Organizations in Gaza Strip".

It is aimed to prepare a research about this subject for academic purposes, and to assess the current practices related to the subject in your organization. Note that the information will not be used for any reason other than the scientific research.

So We are kindly asking for your cooperation to get the required information, by putting (X) in the square related to your answer.

Thank You

Information about the organization

1. Name of Organization	Coastal Municipalities Water Utility ()	Gaza Electricity distribution Company()
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Details Personal

2. Age group	Less than 25 years ()	from 25 - less than 35 ()
	from 35 -less than 45 ()	from 45 - less than 55 ()
	from 55 - Above ()	
3. Gender	Male ()	Female ()
4. Educational Level	Less than Secondary Diploma ()	Secondary Degree ()
	Master Degree ()	Bachelor Degree ()
		PhD ()
5. Job Title	Director or above ()	Manager ()
	Section Head ()	Department Unit ()
	Other technical job ()	Officer ()
		Other Managerial Job ()
6. Years of work in the Organization	Less than 2 years ()	From 2 - less than 5 years ()
	From 5 - less than 10 years ()	from 15 - above ()
7. Years of Experience	Less than 5 years ()	From 5 - Less than 7 years ()
	From 7 - Less than 10 years ()	From 10 - Less than 15 years ()
	From 15 years - above ()	

Part two includes some questions asking about your opinion regarding the current situation of the organization in the following mentioned points, so kindly answer these questions expressing your opinion about the organization's performance, also kindly take this definition into consideration:

Human Resources Accounting is the process of performing a comprehensive system including all employees related data in addition to his performance appraisal, so it can be merged within a special system to calculate and value his monetary value as a human resource to the organization, and then to be use its results in financial and administrative decision making.

Part 2

Put (x) on the answer you choose

1st: Evaluation of top management support

No.	Item	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1	Top management has general understanding about the HRA					
2	Top management has awareness on the importance of HRA application					
3	Top management has got training in HRA					
4	Top management apply HRA in the institution					
5	Top management uses HRA system in its employees-related decisions					
6	The institution considers employees as her most valuable assets					
7	Employees turnover rate is considered relatively low compared to other institutions because they care more about keeping their effective employees					
8	HRA system is designed depending on management expertise					
9	HRA system is designed depending on specialized consultants assistance					
10	Top management has awareness on employees performance appraisal importance in HRA application					
11	Management gives high attention to using performance appraisal results in HRA					
12	The institution cares about providing employees with training courses in HRA					

13	Management makes promotion or bonus decisions based on HRA application results					
14	Management provide employees with awareness programs about valuing them as one of the institution assets					
15	Top management provides incentives to the employee based on his/her productivity and his financial value					

2nd: Evaluation of available financial resources

No.	Item	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
16	Your institution keeps an independent fund for the Human Resources Department					
17	Your institution keeps a special fund for HRA system application					
18	Your institution specializes a specified budget for employees training to raise their monetary value					
19	Future employment plans has a good budget to guarantee choosing the best and most value adding to the institution					
20	The budget specialized for applying HRA is enough for covering its cost such as financial bonuses or incentives					
21	Your institution finances training programs in HRA major					
22	New projects that aim at raising employee's value are highly encouraged by your institution (such as job rotation, internal and external training courses, etc)					

3rd: Evaluation of Human Resources Information system

No.	Item	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
23	There's a complete database for the employees in the Human Resources Department that is used for in HRA					
24	There's competencies and skills database required for each employee according to his job title and position					
25	Human Resources Department updates employees' information regularly and continuously					

26	There're clear systems and policies for career planning and job scale for all departments that clarifies each employee's career path in the institution					
27	There's a unified comprehensive system that clarifies Human Resources policies					
28	The employee's file (including his educational certificates, training, and performance appraisal results) affects HRA based decisions such as promotion, and salary annual increase					
29	Information in the employee's file is comprehensive and enough for valuing the employee as an asset					
30	The direct supervisor cooperates with Human Resources Department in valuing his/her employees as institution's assets					
31	Calculating employee's value as an asset encourages him/her to improve and enrich his/her personal file and update his/her information at the Human Resources Department					
32	An electronic system is used for collecting, storing employees' data and documents to reduce mistakes					

4th: Evaluation of HR measures reliability

No.	Item	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
33	Human Resources Department has enough expertise and knowledge to perform proper performance appraisal					
34	Performance appraisal is done on a regular basis for employees					
35	High attention is given for employees' performance appraisal results					
36	Employees' performance appraisal results occupy the highest weight in valuing employees as assets					
37	Human Resources Department has an expert team with qualification and enough knowledge to manage change and perform HRA					
38	There's a clear plan for applying HRA					

39	Human Resources Department provides employees with training courses to deal with new systems					
40	Human Resources Department evaluates every training course provided for employees					
41	Employees' performance are reevaluated after any training course or developmental program					
42	HR Department team initiate with employees' awareness regarding any new system					
43	There's a succession planning for top management future vacancies					
44	The institution strives to maintain a fair internal system that equals between required job duties and salary paid					

5th: Evaluation of Financial system used

No.	Item	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
45	Financial system used has the ability to calculate Human Resources value					
46	Financial system used contributes in calculating Human Resources value					
47	There's an internal audit on Human Resources value calculation					
48	Accurate information and values can result from the financial system used regarding HRA					
49	The financial system used can be developed to serve new systems application for Human Resources Department					
50	Financial reports produced by the financial system used that calculate HR value have a great impact on top management and Board of Directors decision making					

Mention Your level of satisfaction with calculating your value as an asset of the organization

C. Arabic Questionnaire

بسم الله الرحمن الرحيم



الجامعة الإسلامية - غزة
عمادة الدراسات العليا
كلية التجارة- قسم إدارة الأعمال

السادة/ الموظفين الكرام،

تحية طيبة وبعد،،

الاستبانة التي بين ايديكم هي أداة الدراسة لاستكمال متطلبات درجة الماجستير في إدارة الأعمال، وهي بعنوان: "تقييم مدى تطبيق محاسبة الموارد البشرية في بعض المؤسسات شبه العامة في قطاع غزة".

وذلك لاعداد بحث حول هذا الموضوع لأغراض أكاديمية، وذلك في محاولة لدراسة الواقع الحالي للممارسات المرتبطة بموضوع الدراسة في مؤسساتكم، مع العلم بأن كافة المعلومات التي سيتم الحصول عليها لن تستخدم إلا لأغراض البحث العلمي فقط.

لذا أرجو من سيادتكم التكرم بالمساعدة في الحصول على المعلومات والبيانات المطلوبة ووضع إشارة (X) في المربع الذي يوافق خياركم.

شاكرة لكم حسن تعاونكم معي..

الباحث: سحر بشير البردويل

استبيان

القسم الأول: معلومات حول المؤسسة:

1- مكان العمل: () مصلحة مياه بلديات الساحل () شركة توزيع الكهرباء ()

البيانات الشخصية:

2- الفئة العمرية: () أقل من 25 سنة () من 25 - أقل من 35 سنة () من 35 سنة - أقل من 45 سنة () من 45 - أقل من 55 سنة

3- الجنس: () ذكر () أنثى

4- المؤهل العلمي: () أقل من ثانوية عامة () ثانوية عامة () دبلوم () بكالوريوس () ماجستير () دكتوراه

5- المسمى الوظيفي: () مدير إدارة فما فوق () مدير دائرة () رئيس قسم () مسئول وحدة () وظيفة أخرى فنية () وظيفة أخرى إدارية

6- عدد سنوات العمل في المؤسسة: () أقل من سنتين () من 2 - أقل من 5 سنوات () من 5 - أقل من 10 سنوات () من 10 - أقل من 15 سنة

7- عدد سنوات الخبرة: () أقل من 5 سنوات () من 5 - أقل من 7 سنوات () من 7 - أقل من 10 سنوات () من 10 - أقل من 15 سنة () من 15 سنة فأكثر

القسم الثاني يحتوي أسئلة حول رأيكم في الوضع الحالي للمؤسسة في النقاط التالي ذكرها، فنرجو منكم الإجابة على الأسئلة التالية طبقاً لرأيكم بأداء المؤسسة، كما يرجى أخذ التعريف التالي بعين الاعتبار:

محاسبة الموارد البشرية هي عملية إعداد نظام متكامل يشمل جميع المعلومات الخاصة بالموظف بالإضافة إلى تقييم أدائه ليتم دمجها ضمن نظام خاص لاحتساب وقياس قيمة الموظف المالية (العنصر البشري) بالنسبة للمؤسسة، ومن ثم تستخدم تلك النتائج لاتخاذ القرارات المناسبة إدارياً ومالياً.

ملاحظة: يرجى الأخذ بعين الاعتبار أن كلمة (محاسبة الموارد البشرية) في الأسئلة أدناه لا تعني المساءلة، بل تعني احتساب قيمة الموظفين مالياً كأصل من أصول المؤسسة.

القسم الثاني:

أولاً: تقييم الدعم الإداري

م.	فيما يلي مجموعة اسئلة يرجى منك وضع علامة x امام الاجابة التي تراها مناسبة من وجهة نظرك :	موافق بشدة	موافق	محايد	غير موافق	غير موافق بشدة
1	يوجد لدى الادارة العليا فهم عام لمفاهيم نظام محاسبة الموارد البشرية					
2	يوجد لدى الادارة العليا وعي لأهمية تطبيق نظام محاسبة الموارد البشرية					
3	تلقت الادارة العليا تدريب في مجال محاسبة الموارد البشرية					
4	تقوم الادارة بتطبيق نظام محاسبة الموارد البشرية					
5	تستخدم الادارة العليا نظام محاسبة الموارد البشرية في قراراتها التي تتعلق بالموظفين					
6	تعتبر المؤسسة موظفيها أكثر أصولها قيمة					
7	نسبة الاستغناء عن الموظفين منخفضة نسبياً مقارنة بالمؤسسات الأخرى لاهتمام المؤسسة بالابقاء والمحافظة على موظفيها الأكفاء					
8	يتم تصميم وبناء نظام المحاسبة في الموارد البشرية بناء على خبرة الإدارة					
9	يتم تصميم وبناء نظام المحاسبة للموارد البشرية بالاستعانة باستشاريين متخصصين					
10	الإدارة العليا لديها وعي لأهمية عملية تقييم أداء الموظفين في محاسبة الموارد البشرية					
11	تقوم الإدارة بالاهتمام بتقييم أداء الموارد البشرية في المؤسسة لاستخدامه في محاسبة الموارد البشرية					
12	تهتم المؤسسة بعمل دورات تدريبية للموظفين في مجال محاسبة الموارد البشرية					
13	تقوم الإدارة باتخاذ قرارات ترقيات أو مكافآت بناءً على نتائج تطبيق محاسبة الموارد البشرية					
14	تقوم إدارة المؤسسة بعمل برامج توعية للموظفين بخصوص تقييم الموظفين كأصل من أصول المؤسسة					
15	تقدم الإدارة العليا الامتيازات للموظف بناءً على درجة انتاجيته وقيمه المادية بالنسبة للمؤسسة					

ثانياً: تقييم الموارد المادية المتاحة

م.م	فيما يلي مجموعة اسئلة يرجى منك وضع علامة x امام الاجابة التي تراها مناسبة من وجهة نظرك :	موافق بشدة	موافق	محايد	غير موافق	غير موافق بشدة
16	تخصص المؤسسة بند مالي وميزانية مستقلة لادارة الموارد البشرية بشكل عام					
17	تخصص المؤسسة ميزانية مالية لتمويل نظام محاسبة الموارد البشرية					
18	تخصص المؤسسة ميزانية معينة سنوياً لتدريب الموظفين لرفع قيمة الموظف (العنصر البشري) في المؤسسة					
19	يتم تخصيص ميزانية لعمليات التوظيف الجديدة لضمان الاختيار الأفضل والأكثر قيمة للمؤسسة					
20	الميزانية المخصصة لتطبيق نظام محاسبة الموارد البشرية تغطي التكاليف الناتجة عنه مثل الزيادات المالية في الرواتب أو العلاوات والمكافآت					
21	تقوم المؤسسة بتمويل برامج تدريبية في مجال محاسبة الموارد البشرية					
22	تستوعب المؤسسة المشاريع الجديدة التي تهدف لرفع قيمة الموظف (كالتنقل بين الوظائف، الدورات التدريبية الداخلية والخارجية، الخ)					

ثالثاً: تقييم نظام معلومات الموارد البشرية

م.م	فيما يلي مجموعة اسئلة يرجى منك وضع علامة x امام الاجابة التي تراها مناسبة من وجهة نظرك :	موافق بشدة	موافق	محايد	غير موافق	غير موافق بشدة
23	توجد قاعدة بيانات متكاملة للموظفين لدى دائرة الموارد البشرية لتستخدم في محاسبة الموارد البشرية					
24	توجد قاعدة بيانات للمهارات والكفاءات المطلوب توافرها في الموظف حسب مسماه ووضع الوظيفة					
25	تحرص دائرة الموارد البشرية على تحديث بيانات الموظفين بشكل دوري ومستمر					
26	يوجد نظام وسياسات واضحة للتخطيط والتدرج الوظيفي لكل الدوائر لمعرفة كيفية التخطيط لمسار الموظف في المؤسسة					
27	يوجد نظام شامل موحد يوضح سياسات الموارد البشرية					
28	يؤثر الملف الوظيفي (بما يحتويه من شهادات علمية وتدريب وتقييم أداء) للموظف على القرارات المبنية على محاسبة الموارد البشرية مثل ترقياته وزيادته السنوية في الراتب					
29	المعلومات الموجودة في ملف الموظف شاملة وكافية لاحتساب قيمة الموارد البشرية كأصل من أصول المؤسسة					
30	يتعاون المدير المباشر مع دائرة الموارد البشرية في تقييم موظفيه كأصول للمؤسسة					
31	احتساب قيمة الموظف كأصل للمؤسسة تجعل الموظف أكثر حرصاً على تحسين وإثراء ملفه الوظيفي وتحديث بياناته لدى دائرة الموارد البشرية					
32	تستخدم المؤسسة برنامج الكتروني في عملية تجميع وتخزين بيانات ووثائق الموظفين لتقليل الأخطاء الشائعة في بيانات الموظفين					

رابعاً: تقييم فاعلية قياس قيمة الموارد البشرية

م.	فيما يلي مجموعة اسئلة يرجى منك وضع علامة x امام الاجابة التي تراها مناسبة من وجهة نظرك :	موافق بشدة	موافق	محايد	غير موافق	غير موافق بشدة
33	دائرة الموارد البشرية لديها الخبرة الكافية والمعرفة لعمل الاجراءات السليمة لتقييم أداء الموظفين					
34	تقوم المؤسسة بعمل تقييم أداء للموظفين بشكل دوري منتظم					
35	يولى اهتمام كبير لنتائج عملية تقييم أداء الموظفين					
36	يشكل تقييم أداء الموظفين الوزن الأكبر من احتساب قيمة الموظف كأصل					
37	دائرة الموارد البشرية لديها الكوادر المؤهلة والوعي الكافي لادارة التغيير واحتساب قيمة الموارد البشرية الموجودة في المؤسسة كأصول					
38	توجد خطة عمل واضحة ومعتمدة لتنفيذ نظام محاسبة الموارد البشرية					
39	تقوم دائرة الموارد البشرية بعمل برامج تدريبية للموظفين للتعامل مع النظم الجديدة					
40	تقوم دائرة الموارد البشرية بتقييم أي برنامج أو دورة تدريبية قدمت للموظفين					
41	يتم اعادة تقييم الموظفين بعد أي دورة تدريبية او برنامج تطويري					
42	يبادر موظفي دائرة الموارد البشرية في توعية الموظفين بالنسبة لأي نظام جديد					
43	يوجد لدى المؤسسة خطط لشغل الشواغر المستقبلية في مراكز (وظائف) الإدارة العليا					
44	تهتم المؤسسة بوجود نظام عادل يساوي بين المهام المطلوبة والراتب المدفوع المرتبط بالوظيفة					

خامساً: تقييم النظام المحاسبي (المالي) المستخدم

م.	فيما يلي مجموعة اسئلة يرجى منك وضع علامة x امام الاجابة التي تراها مناسبة من وجهة نظرك :	موافق بشدة	موافق	محايد	غير موافق	غير موافق بشدة
45	النظام المحاسبي المالي المستخدم تتوفر لديه القدرة على احتساب قيمة الموارد البشرية					
46	يسهم النظام المحاسبي المستخدم في احتساب قيمة الموارد البشرية					
47	يوجد تدقيق داخلي على عملية احتساب قيمة الموارد البشرية					
48	يمكن الحصول على نتائج دقيقة من خلال النظام المالي والمحاسبي المستخدم لاحتساب قيمة الموارد البشرية					
49	يتم تطوير النظام المحاسبي المستخدم بما يخدم تطبيق النظم الجديدة لدائرة الموارد البشرية					
50	التقارير المالية التي تحتسب قيمة الموارد البشرية والتي يصدرها النظام المحاسبي المستخدم لها الأهمية الكبرى على قرارات الادارة العليا ومجلس الادارة					

ما هو مستوى رضاك عن قياس المؤسسة لقيمة الموظفين "مالياً" كأصل مهم من أصولها؟
ضع رقماً يعبر عن مدى رضاك من 1 - 10:

شكراً لكم