

### BİNGÖL UNIVERSITY GRADUATE SCHOOL OF SOCIAL SCIENCE BUSINESS ADMINISTRATION DEPARTMENT

# THE ROLE OF HUMAN RESOURCE MANAGEMENT STRATEGIES AND INNOVATION MANAGEMENT IN IMPROVING EMPLOYEE AND ORGANIZATIONAL PERFORMANCE: A CASE OF INVESTMENT BOARD IN NORTH IRAQ

(PH.D. DISSERTATION)

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# T.C BİNGÖL ÜNİVERSİTESİ SOSYAL BİLİMLER ENSTİTÜSÜ İŞLETME BÖLÜMÜ

### İNSAN KAYNAKLARI YÖNETİM STRATEJİLERİ VE İNOVASYON YÖNETİMİNİN ÇALIŞAN VE ORGANİZASYON PERFORMANSININ GELİŞTİRİLMESİNDE ROLÜ: KUZEY IRAK'TA YATIRIM KURULU ÖRNEĞİ

(DOKTORA TEZ ÇALIŞMASI)

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### SCIENTIFIC ETHICS STATEMENT

In this dissertation study entitled "The Role of Human Resource Management Strategies and Innovation Management in Improving Employee and Organizational Performance: A Case of Investment Board in North Iraq. I hereby declare that all information in this document has been obtained and presented under academic rules and ethical conduct. I also declare that, as required by these rules and conduct, I have fully cited and referenced all material and results that are not original to this work. Finally, I hereby declare that the Bingöl university social sciences institute directorate can store and make available electronically the present dissertation.

/ /2022

İmza

Zandi Jabbar AZEEZ

### DISSERTATION ACCEPTANCE AND APPROVAL

### BİNGÖL UNIVERSITY SOCIAL SCIENCES INSTITUTE DIRECTORATE

This Ph.D. dissertation study prepared by Zandi Jabbar AZEEZ, entitled "The Role of Human Resource Management Strategies and Innovation Management in Improving Employee and Organizational Performance: A Case of Investment Board in North Iraq," was found to be successful as a result of the dissertation defense examination held on the date of [ / /2022] and approved with the unanimity/majority of votes by the jury and has been accepted as a Ph.D. in the department of business administration.

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**Dissertation Jury Members' Signature** 

### **CONFIRMATION**

This dissertation was accepted by the jury determined in the / /2022 session of the board of directors of the sciences institute of Bingöl University.

Director of the Institute

Doç. Dr.

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First of all, I take this opportunity to praise Allah, for helping me to complete all academic efforts and stages, besides I would like to thank some individuals, mostly those who provided support during conducting this study. Hence, I am thankful for their support through valued views. Therefore, if it were not for my supervisor and them, I would not have accomplished this Ph.D. dissertation.

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### ÖZET

### İNSAN KAYNAKLARI YÖNETİM STRATEJİLERİ VE İNOVASYON YÖNETİMİNİN ÇALIŞAN VE ORGANİZASYON PERFORMANSININ GELİŞTİRİLMESİNDE ROLÜ: KUZEY IRAK'TA YATIRIM KURULU ÖRNEĞİ

Bu çalışmanın nihai amacı, Kuzey Irak'taki yatırım kurullarının çalışan performansını ve kurumsal performansını iyileştirmede insan kaynakları yönetimi stratejileri ve inovasyon yönetiminin oynadığı rolü araştırmaktır. Genel müdürlük, Erbil yatırım kurulu, Süleymaniye, Duhok, Halepçe ve Kerkük yatırım kurulu gibi yatırım kurulları şubelerinde çalışan yönetici ve çalışanlardan ampirik veriler elde edilmiş ve rastgele örnekleme tekniği kullanılmıştır. Veri toplama, kişisel ziyaretler ve e-posta yoluyla yatırım kurullarının şubelerine davet mektubu gönderilmesiyle başlatıldı. Bu nedenle, anket anketlerinin çoğu, tüm yönetim seviyelerine ve çalışanlara profesyonel bir internet anketi aracılığıyla elektronik olarak uygulandı. Ancak veri toplamanın son aşamasında iyi bir örneklem olarak kabul edilen 428 örnek elde edilmiştir. Çalışmada nicel araştırma yöntemi kullanılmıştır. Verileri analiz etmek için SPSS ve yapısal denklem modellemesine (SEM) dayalı kısmi en küçük kareler (PLS) yol modellemesi kullanıldı.

Korelasyon analizi ile ilgili sonuçlar, tüm çalışma değişkenleri arasında pozitif ve anlamlı ilişkiler gösterdi. İnsan kaynakları yönetimi stratejileri ile inovasyon yönetimi arasındaki doğrudan ilişki pozitif ve anlamlıydı. Sonuçlar, insan kaynakları yönetimi stratejileri, çalışan performansı ve kurumsal performans arasında pozitif ve anlamlı bir ilişki olduğunu göstermiştir. Korelasyon analizinin sonuçları, inovasyon yönetiminin, çalışan performansının ve örgütsel performansın artırılması ile olumlu ve anlamlı bir şekilde ilişkili olduğunu ortaya koymuştur. Ek olarak, çalışan performansı, örgütsel performansın iyileştirilmesi ile önemli ölçüde ilişkilidir. Çalışma ayrıca insan kaynakları yönetimi stratejilerinin inovasyon yönetimini olumlu ve önemli ölçüde etkilediğini ortaya koymakta, bu sonuç insan kaynakları yönetimi stratejilerinde, yani işe alım stratejisi, eğitim ve geliştirme stratejisi, performans değerlendirme stratejisi, ücretlendirme ve ödüllendirme stratejisindeki gelişmelerin, insan kaynakları yönetimi stratejilerini artıracağını

göstermektedir. yenilik. Çalışma, inovasyon yönetiminin çalışan performansını olumlu ve önemli ölçüde etkilediğini ortaya koydu. Sonuçlar ayrıca inovasyon yönetiminin kurumsal performansı olumlu ve önemli ölçüde etkilediğini göstermiştir. Ayrıca, sonuç, insan kaynakları yönetimi stratejilerinin çalışan performansını olumlu ve önemli ölçüde etkilediğini göstermiştir. Ayrıca, sonuç, insan kaynakları yönetimi stratejilerinin örgütsel performansı olumlu ve önemli ölçüde etkilediğini göstermiştir. Etkili insan kaynakları yönetimi stratejilerinin uygulanmasıyla kuruluşlar, tüm insan kaynaklarını vurgulayabilir ve böylece çalışan ve organizasyon performanslarını iyileştirebilir. Ayrıca, insan kaynakları yönetimi stratejileri, çalışan performansı ve örgütsel performans arasındaki ilişkilerde inovasyon yönetiminin aracı rolü ile ilgili olarak, sonuçlar, inovasyon yönetiminin aracılık rolünde insan kaynakları yönetimi stratejilerinin çalışan performansı üzerindeki dolaylı etkisini göstermiştir. Ayrıca, sonuçlar, insan kaynakları yönetimi stratejilerinin, Kuzey Irak'taki yatırım kurulunun çalışan performansının inovasyon yönetiminin aracılık rolünde örgütsel performans üzerindeki dolaylı etkisini göstermiştir.

**Anahtar sözcükler**: İnsan Kaynakları Yönetimi Stratejileri, İnovasyon Yönetimi, Çalışan Performansı ve Organizasyonel Performans

### **ABSTRACT**

## THE ROLE OF HUMAN RESOURCE MANAGEMENT STRATEGIES AND INNOVATION MANAGEMENT IN IMPROVING EMPLOYEE AND ORGANIZATIONAL PERFORMANCE: A CASE OF INVESTMENT BOARD IN NORTH IRAQ

The ultimate purpose of this study is to investigate the role played by human resource management strategies and innovation management in promoting employee performance and organizational performance of the investment boards in north Iraq. The empirical data was obtained from managers and employees working for the branches of investment boards, namely the general directorate, Erbil investment board, Sulamaniya, Duhok, Halabja, and Kirkuk investment board, besides the random sampling technique is used. The data collection was launched through personal visits and sending out an invitation letter to branches of investment boards via email. Thus, most survey questionnaires were administered electronically through a professional internet survey to all management levels and employees. However, at the final step of the data collection, 428 samples were obtained, which is considered a good sample. The study used a quantitative research method. To analyze the data SPSS, and partial least squares (PLS) path modeling, based on structural equation modeling (SEM) were used.

The results related to correlations analysis showed positive and significant relationships between all study variables. The direct relationship between human resource management strategies and innovation management was positive and significant. The study showed a positive and significant relationship between human resource management strategies, employee performance, and organizational performance. The results of the correlations analysis presented that innovation management is positively and significantly related to enhancing employee performance, and organizational performance. Additionally, employee performance is significantly related to improving organizational performance. The study results demonstrated that human resource management strategies positively and significantly impacted innovation management, this result displays that the developments in human resource management strategies, namely recruitment

strategy, training, and development strategy, performance evaluation strategy, compensation, and rewards strategy will increase the innovation. The outcomes of the study presented that innovation management positively and significantly impacted employee performance. The results also showed that innovation management positively and significantly impacted organizational performance. Besides, the result showed that human resource management strategies positively and significantly impacted employee performance. Furthermore, the outcome displayed that human resource management strategies positively and significantly impacted organizational performance. Through the implementation of effective human resource management strategies, organizations can emphasize all their human resources and thus improve employee and organizational performances. In addition, related to the mediation role of innovation management in relationships between human resource management strategies, employee performance, and organizational performance, the results showed the indirect effect of human resource management strategies on employee performance in the mediation role of innovation management. Moreover, the results showed the indirect effect of human resource management strategies on organizational performance in the mediation role of innovation management of the investment board's employee performance in North Iraq.

**Keywords:** Human Resource Management Strategies, Innovation Management, Employee Performance, and Organizational Performance

### **DEDICATIONS**

First of all, I proudly dedicate this Ph.D. dissertation study to my great father, and my kind mother I am always grateful for the love and constant support, which permanently valued.

I am pleased to dedicate to my family, my wife, and my lovely children, you are everything in my life. This journey would not have done without your huge support, love, and patience; in particular my wife,

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### ABBREVIATIONS AND SYMBOLS

**Abbreviation Explanation** 

**AVE** Average Variance Extracted

**CR** Composite Reliability

**CRS** Compensation and Rewards Strategies

**DOI** Digital Object Identifier

**EP** Employee Performance

**EU** European Union

HR Human Resources

**HRD** Human Resources Development

**HRM** Human Resources Management

**HRMS** Human Resources Management Strategies

IM Innovation Management

IT Information Technology

**KMO** Kaiser-Meyer-Olkin Measure

MO Market Orientation

**NFI** Normed Fit Index

OI Organizational Innovation

**OP** Organizational Performance

**RBVT** Resource-Based View Theory

**RIP** Rasht Industrials Park

**RS** Recruitment Strategy

**SEM** Structural Equation Modeling

SMEs Small and Medium Enterprises

**SPSS** Statistical Package for the Social Sciences

**SRMR** Standardized Root-Mean-Square Residual

**PES** Performance Evaluation Strategy

PLS Partial Least Squares

**TDS** Training and Development Strategy

**TQM** Total Quality Management

**UNRWA** United Nations Relief and Works Agency

VIF Variance Inflation Factor

**Symbols Explanation** 

R<sup>2</sup> R Square

 $\chi^2$  Chi-Square

### INTRODUCTION

Human resources undisputedly constitute an organization's real wealth as they play vital roles in its success. In that case, human resources management strategies (HRMS), with their inputs and outputs, pervade the scientific and applied options available to organizations (Wong et al., 2013). The strategic interest in human resources is mainly focused on subjects and issues related to employing human resources decisions to service the visions and ambitions of general strategies adopted and adopted by the organization when facing technological, economic, and social changes (Wan et al., 2002; Shahzad et al., 2008). The strategic management of human resources represents advanced intellectual practices that direct the management processes and activities in an organized manner to pursue the goals and objectives for which the organizations or companies were established. Besides, the application of strategic management practice requires an integrated system that includes a precise mechanism for setting goals, and desired results, and following up on their achievement, modification, and development considering internal and external variables (Ballout, 2002; Zizlavsky, 2020).

This study's goal is to examine HRMS and innovation management's role in improving employee and organizational performance, a case of an investment board in North Iraq. HRM in the organizations represents one of the most critical managing resources and was originally one of the most significant resources owned by the organization. Therefore, the human element has a high and prestigious status, where the organizations will not have success unless preceded by the development and growth of human resources. Human beings are not subject to controllable fixed factors. However, they are characterized by constant mobility and constant volatility, which causes individuals in the workforce to differ according to their well-being and the working environment in which they work (Alsalem and Saleh, 2000; Akhtar et al., 2014).

Thus, human resource management, in its modern form, is not an invention of the hour. However, instead, it results from several interconnected developments dating back to the industrial revolution. These developments contributed directly or indirectly to the need for a specialized human resource department that takes care of the companies' personnel affairs. Due to the importance of the human element, contemporary management is increasingly interested in HR innovating, developing the best ways and mechanisms to invest its energies and employ its capabilities. Human resources management is considered a strategic approach to managing the organization's most essential assets represented in the human capital through effective recruitment of high labor, skill, and commitment in a dynamic and fast environment change (Boxall and Purcell, 2011).

Human resource management considers that men and women are essential resources that must be developed and invested with a modern view. The human element is a determinant of position competitiveness and achieving leadership and survival in a competitive environment. The contemporary approach to HRM emphasizes the need to look at the human element. It is one of the inventiveness assets because of its fundamental impact on efficiency and effectiveness and not a production to improve productivity and development. The studies on HRM and innovation have expanded in importance in the literature during the last few years (Chang and Huang, 2009) and, most significantly, their influence on employees, organizational performance, effectiveness, and commitment. Human resource management strategies (HRMS) as planned activities are implemented to enable businesses or projects to achieve their objectives (Caliskan, 2010). Management of the human resources strategies is to processes under the business's approach as a handling process that enables business strategies to be realized more effectively (Akhtar et al., 2014; Koser et al., 2018).

Accordingly, HRMS is considered a tool for integrating HRM activities and their processes into operational strategies. And HR strategies as the plans, the programs, the body of trends that HR and department managers share to meet the human capital that can meet the future needs shaped by the shifts around the organization (Boxall and Purcell, 2011). It is well known that all departments, including human resources management, effort to achieve success, and overcome problems and crises through the scientific foundations that lead to winning and adopting the right ideas that show and are completed by scientific methods. It is also clear that development and growth depend mainly on innovation since the path of progress is achieved by human resources management strategies and innovation

management (Chen and Huang, 2009). For human resources managers to perform their strategic role in organizations, they must contribute their shares to their organizations' development and growth. In other words, these organizations should be prepared to add tangible value to the organization's effectiveness and efficiency. There is a clear call for HR managers to become strategic contributors to the organization's success by managing HR with a business-like approach.

In the same context, innovation management and capacity are essential elements that ensure industries' sustainability. Innovation is a critical factor for organizations to create value and sustainable competitive advantage in today's complex and changing environment. Hence, identifying the obstacles to innovation is the first step in providing an appropriate climate for inventiveness, and enhancing organizational and employee performance. Moreover, to achieve this goal, the organization pursues to develop strategies for implementing innovation. Innovation strategies mean the corporate policies designed to promote the inventive process and produce an organization's innovation climate. These strategies are numerous and overlap with each other. Innovation management's success is significant when it is a strategic approach for survival and continuity in competition.

Organizations with more innovation will be more successful, allowing them to achieve better performance, respond to the changing environments, and create new capabilities (Farhang et al., 2018: 75). Consequently, organizations need to be innovative to put products and processes to market by forecasting clients' needs to obtain a competitive advantage in a rapidly changing business environment (Stewart and Fenn, 2006). Businesses, including investment boards that are more entrepreneurs in project innovation, will be more successful if they can respond to changing environmental conditions and develop new capabilities that will allow them to deliver better performances of the employees and organization. Therefore, innovation supports entrepreneurial businesses in reducing costs, improving performance, and doing new projects to increase competitiveness. Investment boards contend that HRM's development and implementation are critical to benefit such essential employee and organization contributions. Consequently, innovation management characterizes the introduction of new things and enables them to bring

an advantage usually. It can relate to information technology, systems, knowledge production, processes, cultural behavior, organizational structures, and management.

Thus, effective innovation management can benefit from avoiding crises. Therefore, an innovative attitude could help survive (Koser et al., 2018). The importance of understanding the concepts of HRMS and innovation management (IM) is beginning to be realized as the flawed logic that innovation projects are coincidentally linked to information and knowledge (Rasool et al., 2019). Therefore, this study determines HRMS and innovation management's role in improving employee and organizational performance is not about making innovative interpretations but about providing an innovative environment in which solutions can be considered, established, and applied to investment projects. Modern organizations pursue to raise employee and organizational performance levels and support and enhance their human resources, such as training and development, evaluating their performance, and motivating them by developing their management practices and using them to improve the outcomes.

### Reader guide

To reach the main purpose of the study, the subjects were organized into five chapters. Chapter one is covered the study background and theories, the previous studies were classified into three parts: The first deals with studies related to human resources management strategies. The second addressed the research on innovation management. Also, addressed modern approaches to innovation, which are always linked to achieving management excellence by developing creative people's skills to ensure their ability to transform their ideas into innovative projects. While part three included the research on employee and organizational performance. This chapter also included the problem of the statement and questions that were formed based on the study theories. In addition, addressing the purpose of the study, study significance, and definitions of the basic terms. Chapter two is included literature related to the study constructs, the study model, and hypotheses development

Chapter three described the study methodology to define how the study is conducted. The main objective is to obtain data from different sources, including empirical data from survey samples, and determine data analysis to achieve the study's primary purpose, besides ensuring the results' accuracy. Therefore, this study

used a quantitative method that reflects social designs. The quantitative method effectively collects the empirical data identified in the label to explore its various indicators, links, analysis, practical interpretation, and conclusions that contribute to this. This chapter dealt with survey measurement, the study population, and sampling, ethical considerations, and data analysis procedures.

Chapter four displayed statistical analysis, based on empirical data obtained from managers and employees at investment boards in north Iraq, for analyzing the possible correlations between the model constructs or variables. In addition, the empirical data analysis and show results in this study also aimed to clarify the study hypotheses and facts particularly to answer the study's main question and clarify the relationship between the constructs. Chapter five addressed discussions on findings, main conclusions also provided managerial contributions, and theoretical contributions, furthermore, covered the limitations and suggestions for future studies.

### **CHAPTER ONE**

### STUDY BACKGROUND AND THEORIES

### 1.1. The Background of Study Variables

This section aimed to present previous studies related to the study's topic that the researcher could review. Thus, according to the study's purpose, the previous studies were classified into three parts: The first deals with studies related to human resources management strategies (HRMS); human resources (HR) is considered one of the main determinants of productivity in various establishments. The human resources plan organizes, takes decisions, implements, follows work progress, and achieves specific goals. It is represented in the optimal (efficient) use of the available resources (Shipton et al., 2005).

The second addressed the research on innovation management; as Smith et al. (2010) mentioned, there is a close relationship between innovation and employees and organizational performance. Modern approaches to innovation are always linked to achieving management excellence by developing creative people's skills to ensure their ability to transform their ideas into innovative projects. As they are the pillar of the desired distinction in the quality, leadership, and development of performance, and despite the fertility of terms defining creativity and innovation, controversy still exists about the differences between them, except that the thing in which there is no doubt everyone will agree. The thought process of distinguishing an individual from another is one of the most complex types of human behavior. It is the basis for generating innovation. While part three included the research on employee and organizational performance; and the following is a detailed presentation of these studies:

### 1.1.1. The Background of HRMS

Human resources represent an important strategic resource of the organizations and companies that determine their chances of survival and success, as human resources are the most important part of the organizations and the main key to success for all public and private establishments (Cania, 2014). Organizations have

increased their conviction that human resources are one of the strategic weapons in their struggle for growth, which has imposed on them the need to consider these resources as a strategic partner that has a vital role within the organization's strategy by linking the goals, objectives, and strategies of the organization with the activities of human resources (Arnold, 2010; Talal, 2011).

Strategic management of human resources is an approach or framework for making strategic decisions about system workers at all organizational levels. This strategic management is directed under the umbrella of the organization's general strategy to create and maintain a competitive advantage (Zehir et al., 2016). It is an expression of the organization's overall direction to achieve its strategic objectives (long-term) through its human resources that contribute to organizing its strategic plan, despite the emergence of HRM in different forms and levels within the organizational structures of establishments. The process of objective linkage between the general organization strategy, business strategy, and strategy of functional levels requires considering a set of considerations when determining the location of human resources management in the structure of the service or product organization (Caliskan, 2010).

As a first attempt, Ferris et al. (1990) examine the influence of human resources management strategies (HRMS) on organizational performance. In their research on 2,236 companies in the construction industry in the United States, the researchers investigated the roles of three primary managerial functions and activities around corporate performance. As a result, the research found that companies with human resources management (HRM) departments were generally high-performing. However, companies with a higher percentage of their employees performed better than companies with lower employees. Finally, companies performed better when they engaged in more formal strategic planning. In this research, Alani (2002) examined the influence of human resources management strategies (HRMS) represented by three strategies (recruiting, training and development, and compensation) in supporting total quality management programs. As a data collection method, the questionnaire survey was used. The researcher collected empirical data in the governmental industrial sector, which industrial organizations

represented. The results found a significant positive correlation between the strategies of human resources management and total quality management (TQM).

Maxwell and Lyle (2002) studied HRM and business performance strategy in the Hilton International Group. The researchers obtained empirical data from the tourism sector represented by the Hilton International Group hotels with its various branches located in more than (50 countries), and hotels number about (500 hotels) in which more than (60,000 workers) are employed. The research found that business performance, especially financial performance, is greatly influenced by HRMS. In Singapore, David et al. (2002) examined the link between HRMS, corporate finance, and HR performance. To reach the research's purpose, they used descriptive statistics and regression to analyze the experimental data. The results showed that, except for team-based work and performance-based pay, all other strategic practices in HRM positively influence companies' financial performance. In addition, the results also showed that all HRM strategies have a positive influence on the performance of human resources.

In his research, Dharmasiri (2009) examined HR managers' strategic orientation in South Asia's commercial banks. As mentioned by the researcher, the study tried to answer the main question; what are the strategic orientations of human resource managers in South Asia are. It dealt with personal factors and factors related to the organization that contributes to managers' strategic directions of human resources management and their interconnection. However, the research was applied to high-performing commercial banks in Bangladesh, India, Pakistan, and Sri Lanka. The study concluded that personal factors appeared in knowledge, skills, perception, and work requirements. The organization-related factors emerged in both the clarity of the concept of HRM among managers and performance trends.

Rathnawerera (2010), in this study, analyzed the effect of HRM strategies on the outputs of human resources management such as job satisfaction, commitment, and retention of employees in the public sector, and banks in Sri Lanka. The researcher used the questionnaire tool to collect data consisting of (209) employees working in various departments in two public banks in Sri Lanka. As a result, the study concluded a significant relationship between HRM and three study variables: job satisfaction, commitment, and employee retention.

In their research, Gong et al. (2009) investigated HRM and organizational performance: the role of managerial affective and continence commitment. The researchers used a dual model of (retention and performance) for HR performance, and the researchers tested HRM applied to middle management in (463) organizations operating in China. The results found a positive relationship between the performance curve and the organizations' performance. As for the retention curve, the research also found a positive relationship with middle management's commitment, but not with organizations' performance.

Arnold (2010) examined HRM for successful strategy implementation. The researcher also aimed to know how to manage HR to implement strategies and improve job performance effectively. The results found that healthcare organizations' managers face challenges in implementing strategies related to achieving their goals. The study showed difficulty in implementing procedures effectively because success in this depends on managing resources. The research also presented that the organization's culture positively affects managers' attitudes toward implementing HRM strategies. Talal (2011) investigated the impact of innovation management on improving HRM performance in Jordanian banks through several axes, including identifying the importance of interest in innovation management in Jordanian commercial banks. As a result, the research found a significant effect of innovation management on the performance of HRM.

Yilmaz (2011) examined searching HRM in large Turkish companies. As the researchers mentioned, this study aimed to show the level of implementation of HRM strategies for major companies in Turkey, which were defined by Istanbul Trade (2010), and selected (70) companies from (150) most massive companies in terms of the number of employees. The study found that the companies' strategy was not related to industry size, ownership quality, and age. The study also showed the advanced implementation of HR strategies in large companies.

In the same regard, research conducted in Pakistan by Mumtaz et al. (2012) examined HR practices' influence on academic members' job satisfaction. The results of the study found that HRM practices affect the job satisfaction of university teachers. Compensation system and empowerment practices increased academic members' satisfaction, whereas performance evaluation and promotion practices

negatively influenced job satisfaction. Nazmul et al. (2014) conducted research to show the extent of developing HRMS for steel companies in Bangladesh. The researchers surveyed (62) employees from (6) different factories. They also interviewed managers of HR in three different companies. The results showed the absence of interactive relationships between employees and managers and the lack of influence of the work environment on developing human resource management strategies.

### 1.1.2. The Background of Innovation Management

Innovation-based human resource has been used in some studies, mainly in the past few years. Various experts have indicated in their studies that innovation is identical to strategic MRM, which views human resources as an investment asset and HRM as a strategy rather than a reaction, guidance, or management (Buyens and De-Vos, 2001). Jaber (2010) examined innovation management and its impact on job performance. The researcher implemented a descriptive and analytical methodology, designed a survey questionnaire, and then distributed it to all the study samples (208 managers and directors). As a result, the research displayed that innovation management positively correlated with UNRWA school principals' job performance.

Singh and Agarwal (2011) conducted research to find out how innovation based on HR leads to HR creation value and organizational performance. As the researchers mentioned, they aimed to realize the conceptual advance of the innovation related to HRMS, its definition, how it differs from traditional HRM, its relations with HRMS, and its relationship to creating value and organizational performance. However, they comprehensively reviewed the literature from theoretical and practical research studies to examine the association between innovative HRM, human resource value creation, and organizational performance carried out and depicted using a conceptual model. Results showed a significant relationship between innovation based on HR and organizational performance.

In their research, Johnston et al. (2012) investigated innovation and business orientations in small and medium-sized enterprises. The researchers argued that SMEs' ability to lead and form markets is one way to achieve a competitive advantage. Market-leading companies leverage radical and destabilizing innovation

to shape current and future customers' needs, thereby changing the market structure. The results found that entrepreneurial companies are more expected to develop market-driven leadership and innovation markets, while market-oriented companies are likely to develop market-driven innovations.

Kour and Gakhar (2015) examined innovations based on HRM strategies in Indian banks. The researchers stated that this research calls for innovative research linked to banks' human resource practices to enhance employee productivity. It also provides insight into such innovations correlated to human resource management with a preliminary study based on human resource managers' views at eight different Indian banks. These innovative HRM have been incorporated under seven other heads of the human resources department named employee recruitment and selection, training and development of the employee, performance management, compensation and career development, motivation, and employee security. It was also referred to as a few previous studies to conclude these conclusions.

Bucciarelli (2015), in research, reviewed innovation management and change. Accordingly, the researcher examined the most influential theories in managing innovation and change and compared some of the most administrative theories focusing on soft people. However, the research applied the qualitative approach, specializing in human interaction and stakeholders' strength in change. As a result, it confirmed that innovation management is a vital factor in the change process.

### 1.1.3. The Background of Employee and Organizational Performances

The topic of employee and organizational performance has received significant attention and witnessed continuous research on them. Organizational performance is considered the only way to achieve work goals—economic progress for all developed and developing countries (Ali et al., 2019). Thus, organizations are still looking for new leaders by re-establishing designing their structures, involving their employees in developing policies more, creating a system of quality circles, and creating new incentives for concrete individual, group efforts, and other achieving methods improving performance (Abualoush et al., 2018).

In Russia, Fey and Bjorkman (2000) examined the impact of HRM practices related to employee development, compensation, and feedback system on MNC, and

the performance of (10) foreign companies operating in Russia. The study used both regression and correlation analysis. The study concluded that there is a strong relationship between HRM and organizational performance. In India, Singh (2004) conducted research to examine the influence of human resources practices on organizational performance. As a result, the researcher found a positive relationship between several human resource management practices. Such as selection, performance evaluation, training, compensation system, and employee involvement in the performance of organizations, and among these practices, the training and compensation system had the most considerable impact on the organizational performance.

In Iraq, empirical research was conducted by Ahmed et al. (2008), which examined the empowerment strategy's role in improving organizational performance. The study reviewed the requirements necessary to improve scientific leaders' performance (heads of departments) and their willingness to provide modern means and tools, represented by the researched organization's empowerment strategy. The study also showed that the empowerment method is one of the modern and contemporary issues in business organizations that express an administrative philosophy that aims to achieve performance improvement through its basic requirements. The empirical results also showed a mutual influence between the empowerment strategy and improving performance, which requires the exploitation and investment of empowerment levels. In the surveyed organization, it is a building tool for developing scientific capabilities.

Jabouri (2009) examined the influence of IT on organizational performance in Iraqi electrical industries. The researcher obtained empirical data from the Iraqi electric industry's general company and analyzed the actual use of techniques and computers and their influence to raise the performance. The results found that using IT techniques and computers affects organizational performance. In this research, Khan (2010) assessed the impact of HRM on the performance of petroleum industries in Pakistan. The study obtained a sample of 150 administrators of twenty industrial establishments. To examine the empirical data, the researcher used correlation and linear regression analyses. Results showed a strong relationship between HRM and the performance of these organizations.

In Jordan, Dahkoul (2018) research examines employee performance, especially in the industrial sector, and explores the impact of employee satisfaction, the standards of management, and training on employee performance while exploring the mediation effect on employee engagement. The researcher applied a survey to collect empirical data from 100 administrative and executive managers. The research found that employee satisfaction, management standards, and training are essential factors for employee performance, affecting employees' participation, and leading to employee performance. In their research, Abdullah et al. (2020) attempted to study information systems' effect on improving faculty performance. The researchers used a sampling technique to obtain data from academic members. However, the surveys received 305 functional questionnaires and evaluated the data using partial least square PLS. The result was concluded that information systems have a significant favorable influence on the performance of academic members.

### 1.2. Research Problem and Questions

The study's problem is embodied in two aspects, one regarding the need for investment projects in northern Iraq to continuously define new opportunities beyond their current capabilities if the investment boards want to continue under the conditions of this rapidly changing world. Through their interest in building entrepreneurial projects prompted the present study towards exploring the nature of human resources management strategies and innovation management in the investment projects and studying their impact on the distinguished employee and organizational performance of the investment board toward the entrepreneurial direction, it is projected.

The second aspect of the study problem related to the challenges that globalization and technological developments impose on the operating environment of the investment property, which among the most significant is the contemporary trend of many countries towards linking their investment projects to the HRM strategies and innovation management practices (Subramony, 2009; Koser et al., 2018; Farhang et al., 2018). As well as providing opportunities for the industrial sector to do business through the application of innovative ideas, this approach requires investment boards to turn into a risk-taking organizations with exploratory

and artistic activities that encourage entrepreneurial ideas that serve the industry (Trott, 2005; Weerawardena et al., 2009; Smith et al., 2010). Therefore, the main problem of the investment boards in Northern Iraq, as a public body, is that they did not take the significance of creating a supportive climate for innovators. Therefore, the investment boards should take various measures to determine HRM and innovation management's current innovative capabilities. It can be found in the impact of the multiple variables surrounding employees, which affect their creative capabilities.

Consequently, the current study sought to study HRM strategies and innovation management practices and then know their impact on the employee and organizational performance of the investment boards. As previously mentioned, this study's purpose is to observe the role played by HRMS and IM in improving employee and organizational performance of the investment boards in North Iraq. Accordingly, the study effort to answer the main research question: To what extent do HRMS and IM play their role in the employee and organizational performance of the investment boards in North Iraq. So, to answer this question, the study also attempts to answer the following sub-questions:

- 1. What are the nature of the relationship between human resources management strategies (HRMS), and employee and organizational performance of the investment boards?
- 2. Do the human resources management strategies (HRMS) impact the employee and organizational performance of the investment boards?
- 3. Do the human resources management strategies (HRMS) and IM impact the investment board's employee and organizational performance?

### 1.3. Purpose of the Study

First, human resources management strategies are principally one of the management areas concerning the project staff's innovation utilization in attaining its business objectives (Raymond, 2009). However, human resources management strategies being deployed consist of hiring, training and development, performance management, rewards, and compensation (Wayne, 2010). human resources management strategies were valued for enabling employee activities in intellectual

capital formation, leading to competitive advantages in businesses. Accordingly, the current study aims mainly to identify the role of human resource management strategies and innovation management in improving employee and organizational performance of investment board in North Iraq through studying and achieving the following goals:

- 1. Identifying the practices and strategies of human resources management in the investment boards in North Iraq.
- 2. Determining the level of innovation management and particularly knowledge sharing behaviors in the investment boards in North Iraq.
- 3. Determine the relational effect of human resources management strategies (HRMS) and innovation management on the investment board's employee performance and organizational performance.
- 4. Provide reasonable proposals that would contribute to the development of human resources management and innovation management practices.

### 1.4. Study Significance

The importance of the study stems from the fact that it mainly focused on the human element and innovations in HR as they are considered the most important invention elements in the organizations. This resource is realized as the main axis for the success and achievement of the organization's goals and strategy. The study also draws its significance to the intention of a clear consciousness among managers in the investment board in Northern Iraq on human resources management strategies (HRMS) and innovation management (IM).

Besides improving, HRM and IM strategic functions improve employee and organizational performance within Northern Iraq's investment projects. Human resources are essential at each phase of corporate life, including identifying the abilities and competencies needed for the company. In this regard, Shalley et al. (2000) argued that enlarged competition between businesses and fast technological change in the business world had improved HR importance. This vital resource can cope with this rapid change in organizations and the organization's contests by providing advanced solutions to these new issues and ideas. Thus, human resources are an essential factor in a management's success or failure; Accordingly, the

companies should classify the features that can overcome employee work shifts, create satisfaction, and increase employee performance. HRM strategies are an essential application in improving business performance, and one of the most critical multiple strategies implemented by organizations is its success.

While innovation management by HR is a crucial element in the process of economic and social development. Innovation projects determine the degree of progress and advancement of nations. Therefore, companies must today continually adapt to their environment through innovation and development; in this regard (Thomas, 2011) agreed with (Stewart and Fenn, 2006) that innovation in HRM is the main engine for the growth and development of companies through the development of new products and to make the company more competitive. However, innovation management in investment projects is crucial to achieving effective employee and organizational performance. The study's expected contribution is to managers within the investment boards in Northern Iraq that would significantly impact employee and organizational performance and build entrepreneurial orientation in their projects.

### 1.5. Theories of Study

Various theories, particularly resource-based view theory (RBVT) support that HR should be treated as an essential resource for any organization. More importantly, theories of RBV and knowledge have made this argument and favored HR and other organizational resources in generating organizational performance (Rasool et al., 2019). Therefore, managers have replied during recent decades by implementing a range of HRM strategies to support their organizational performance, including recruitment strategy, performance appraisal, employee training and development, compensation, and rewards system (Wright et al., 2001). Chang and Chun (2005) empirically examine that HRM strategies and practices have provided various strategic management perceptions and led to organizational competitiveness and employee work dynamics. However, innovation management stimulates and enhances its overall performance to ensure its success and be a market leader.

In this regard, some previous HRM studies have focused on innovation in HRM rather than innovation and HRM. Initiatives such as high-performance work practices have been highlighted as innovations within HRM (McCartney and Teague,

2004; Murphy and Southey, 2003; Richard and Johnson, 2004). Similarly, flexible benefits plans have been heralded as HRM innovations (Barringer and Milkovich, 1998). However, these have not essentially explained those that fall within the purview of HRM, who see their contribution to developing broader innovation capabilities within the organization. HRM has a critical function in stimulating corporate innovation processes (Li et al., 2006) by impacting inventiveness (Jiang et al., 2012) and knowledge sharing (Jiménez and Valle, 2011).

This task is, instead, a challenge to manage. They must address the fact that possible solutions to new problems not only arise (Mumford, 2000) but also recognize that knowledge or technical expertise is the only factor influencing inventive problem-solving. That is, developing something new requires more than existing knowledge. Innovation establishes how managers lead, shape, and manage organizational innovation as an essential research area in organizational management literature. In general, there are three overall approaches to innovation: first, innovation is a determining factor in corporate growth and high business performance (Gumusluoglu and Ilsev, 2009).

This approach emphasizes an innovation-oriented business strategy and grants a more significant investment in organizational capability to innovate new products. The second approach considers innovation a by-product of dynamic organizational development and describes its atmosphere and business case focusing only on managing innovation. The third approach attributes innovation as a contributing factor but emphasizes a delicate balance between innovation and other factors contributing to a business's effective performance (Lawson and Samson, 2001). The various levels of allocating importance to innovation explain, in advanced management literature, thinking and strategies for leadership and innovation management by managers (Razavi and Attarnezhad, 2013).

Koster (2019) studied innovative HRM as a review of the literature. Based on an investigation of 47 research papers, three main approaches were identified to address innovative human resource management. First, innovative human resource management can refer to innovation in human resource management. Other studies focus on how human resource management responds to innovations. Third, the term innovative human resource management is found in the literature that focuses on

organizational innovation. These three approaches are discussed, along with theoretical explanations. The note is closed, with implications for research and practice. Accordingly, HRM plays a vital role in impacting innovation, and performance. For instance, a performance-based appraisal is a challenge for the employees who motivate them to work better (Jaw and Liu, 2003).

HRM strategies approach that is linked to the innovation of the organization primarily focused on best practices. The literature review shows four strategies, which have been consistently related to innovation, recruitment, performance evaluation, compensation system, and training (Jimenez and Valle, 2005; Mohd et al., 2011; Laursen, 2012). Organizations can use HRM practices like recruiting, training, performance appraisal, and compensation to motivate employees and propel them toward creative and innovative thinking (Laursen and Foss, 2003).

The resource-based view indicates that the company's resources are crucial to long-term development. Human capital is a significant resource that influences innovation if it is precious, difficult to imitate, and inapplicable to replace (Boxall and Purcell, 2003). The resource-based view theory also supports the notion that organizational resources are significant for maintainable success. In this context, HRM strategies and organizational innovation management are essential to an organization's resources (Li et al., 2006). The resource-based view also states that different capabilities and corporate resources positively affect organizational outcomes, including employee performance (Anjum et al., 2018).

Various studies have been conducted and published on the specific topic of effective HRM strategies, innovation management, and their effects on organizational performance; thus, these support the existence of a positive relationship (Guthrie et al., 2009). Some scholars with a universalistic approach have argued that HRM practices collectively improve employee and organizational performances (Delery and Doty, 1996; Geringer et al., 2002). Moreover, recommend the use of HRM practices to enhance financial, operational, and organizational performance. Others suggest that forms of HRM strategies promote organizational performance (Delery and Doty, 1996).

#### 1.6. Definitions of the Basic Terms

Human Resources Management (HRM), is a set of activities, that obtains, develops, and conserves human resources to provide business organizations with a productive, stable, and satisfied workforce. It is also the activities acquired through continuity in caring for human resources, which constitute a comprehensive strategy based on employment, development, planning, performance evaluation, and demonstrating the importance of functional relationships (Akhtar et al., 2014).

The Human Resources Management Strategies (HRMS) is the process that aims to link the organization through its most valuable resources represented in human resources with its environment in a way that can improve the employee and organizational performance (Ballout, 2002; Caliskan, 2010).

Recruitment Strategy (RS) may define as one of the most critical strategies for human resource management with a direct impact on the organization, as the process of accepting inaccurate appointment decisions affects organizational performance and limits the process of achieving desired goals, such as obtaining and maintaining talents is crucial to the organization's success. The organization's recruitment strategy creates a pool of qualified candidates for vacancies and a wise choice to fill vacancies (Boxall and Purcell, 2003).

Training and Development Strategy (TDS) are the organization's planned and organized effort that improves employees' performance in the current job or one of its associated jobs, making changes in specific skills, behaviors, and attitudes. Daft (2003, 422) explains that training and development are processes planned by the organization to facilitate employees' learning of what the work requires (Collings et al., 2010).

Performance Evaluation Strategy (PES) in the process that aims to improve the ability of employees to contribute to the success of organizational goals and to help plan human resource needs, enhance training, and determine wages and incentives in a manner that results in changes in thickness and performance (DeNisi and Pritchard, 2006).

Compensation and Rewards Strategy (CRS) are an essential means to attract and retain employees and improve their performance in a direction that serves the organization's ability to enhance the performance, as it can be applied to individuals, groups, and organizations of both material and non-material types (Casio, 2013).

Innovation Management (IM) is the ability to find good ideas, solutions, projects, methods, and valuable work procedures. It builds on the human capital, besides their mental capabilities and intellectual ability. The knowledge that can be developed, and the strengths that can be developed to generate innovative ideas and solutions, thus, the concept of innovation management stems from the general concepts of innovation. Innovation in management is related to new management, project development, work teams' leadership, employee and organizational performance improvement, and all known management functions (Bucciarelli, 2015).

Organizational Performance (OP) is the degree of achievement to which an employee fulfills the workplace's corporate mission is called performance. An employee's job is built up by the degree of achievement of a particular target or mission that defines performance limits (Caliskan, 2010).

## **CHAPTER TWO:**

#### LITERATURE REVIEW

## 2.1. The Literature on HRM Strategies

Human resource (HR) defines the individuals who make up the workforce in an organization, although it also applies in labor economics, for example, business sectors or even entire countries. Human resources are also the position within an organization charged with overall responsibility for implementing strategies and policies related to individual management (i.e., human capital). This role title is often abbreviated to the initial's human resources (Eslami and Nakhaie, 2011). Hence, HR is treated as one of the critical resources in organizations nowadays. The activities of managing human resources are termed HR practices. Since the 1990s, some researchers had investigated and furnished supportive evidence on HR practices' role in establishing and enhancing organizational performance (Intan et al., 2011).

According to Raymond (2009), in business companies, HR is mainly one of the areas of management related to the productive operation of the company's workforce in achieving its business objectives. HR practices comprise recruitment, training, development, performance management, rewards and compensation, health, and safety (Casio, 2010). HR is becoming a basis of enhanced opportunities in becoming a competitive advantage for organizations (Caliskan, 2010).

HR knowledge allows firms to increase distinctive competencies and identify innovation; when organizations develop new products or enhance their management processes, they need HR motivation to produce, develop creative ideas, and innovate. HR can help build an environment that motivates and equips employees to think and innovate, adding to organizational innovation performance (Chen and Huang, 2009).

According to Heneman and Milanowski (2011), various management scholars describe HRM as the set of activities that will put human resource strategies into practice and are directed towards improving performance, enhancing the competencies, skills, and knowledge of human resources strategic objectives. As indicated by Eslami and Nakhaie (2011), HRM manages an organization's employees. This includes recruitment and arbitration under the law and company

directives. The HRM system refers to the systems and processes at the intersection between human resource management and information technology.

Human resource management is processing, particularly its necessary activities and operations in information technology, while programming data processing systems evolved into standard procedures and enterprise resource planning software sets. Human resources are defined as the size of the workforce: the group of individuals and groups that make up the institution at a particular time, and these individuals differ in terms of their composition, experience, behavior, attitudes, and aspirations (Raineri, 2017).

They also differ in their jobs, administrative levels, and career paths. Human resources are considered one of the most important strategic resources in the organization. It works to improve its performance and achieve its goals, and this uses various knowledge and skills to design and implement its strategies and achieve an added value. Therefore, for individuals to become a resource, they must have the experience, skill, ability, and talent necessary to perform specialized and distinguished tasks (Kreitnerand Kinicki, 2010). Human resource management is the activities related to the organization's obtaining, developing, motivating, and maintaining its needs of human resources to achieve organizational goals with the highest levels of efficiency and effectiveness. it's the business environment and thus its ability to achieve its goals (Werner et al., 2012).

HRM functions in organizations mainly that focus on recruitment and providing direction for the people who work in the organization. Line managers can also perform HRM. HRM is the organizational function that deals with issues related to people such as compensation, hiring, performance management, organization development, safety, wellness, benefits, employee motivation, communication, administration, and training (Eslami and Nakhaie, 2011). HRM also involves policies and practices to engage and manage people, including individual management activities, such as recruiting, motivating, developing, and retaining employees, and processes to inform, consult, and negotiate with individuals and groups (Boxall and Purcell, 2011). Human resources management has been evaluated to facilitate incorporating employee activities into the formation of intellectual capital, which has resulted in competitive advantages for companies (Wright et al., 2001). Human

resource management practices shape employees' knowledge, skills, abilities, values, and attitudes.

Human resources management is a critical function in the organization. The most complex one is that it deals with the most essential and essential element of the production. The organization's resources are most vulnerable to being affected by various environmental changes. Directly or indirectly, from the emergence of specialized personnel management that takes care of workers' affairs, working to provide the most successful mechanisms to efficiently manage human energies and increase workers' productivity (Maxwell and Lyle, 2002; Talal, 2011).

Thus, business management has focused on the material aspects of the productive process and neglected the past human element. However, with the recent developments in the administrative aspects, it has become an obligation to take care of the human element. Since the success of any project depends significantly on the effectiveness and skill of workers in the performance of their work, they are the primary source and focus for achieving competitive excellence. HR is an essential element that cannot be ignored or diminished by the role it performs (Caliskan, 2010).

HRM strategies are related to setting human resources goals and determining appropriate methods to reach organizations' goals (Policastro, 2003). Different HRM strategies are realized as valuable to stimulate and support inventiveness, mainly by enabling employees' freedom, hence improving innovation processes (Jiang et al., 2012). By the dual role of both representing structure and managing work. Simultaneously, stimulating creativity and freedom among employees; however, it is possible to imagine that the HRM strategies that are being also used could constrain creativity and innovation processes rather than developing them.

Therefore, HRM strategies become critically important in how organizations influence individuals' behavior, and skills, which is essential in whether organizations deliver innovations consistent with their goals (Chen and Huang, 2009). However, the role of human resource management in organizations is dual. On the one hand, human resource management relates to the organization's policies and practices and administration of work, including the basic structure for organizing work (Zehir et al., 2016).

It is believed that HRMS is a framework for strategic decision-making on the organization's staff at all organizational levels considering the organization's overall strategy, to build and maintain a competitive advantage for the organization. HRMS also is the organization's general direction to achieve its strategic objectives through its human resources, which contributes its efforts to the implementation of the organization's strategic plan. Furthermore, in this study, we take four main HRM strategies as shown in Figure 2.1, below.

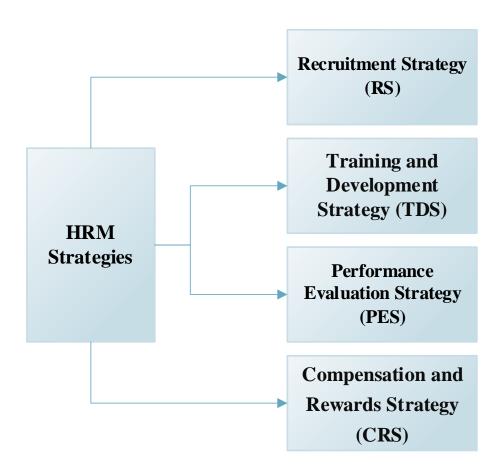


Figure 2.1. The HRM Strategies

**Source:** By the researcher based on reviewed literature related to HRMS

#### 2.1.1. Recruitment Strategy (RS)

Recruitment strategy (RS) is the main action that consists of interconnected, integrated sub-activities, the whole of which constitutes a series of works that enable HR to provide the organization's needs of workforces of all kinds, and according to specific specifications to fill existing jobs in the organization. Include a first group is a group of sub-functions: job analysis and description, human resource planning,

human resource recruitment, human resource selection, and appointment. According to Chen and Huang (2009), the recruitment strategy is the range of activities and procedures used by the organization to identify employment sources and attract them according to the specific disciplines required in the human resources plan. Thus, recruiting means picking the best candidates to provide the organization with the organization's planned human resources to fill positions through various advertising means does not mark the end of this strategy's limits. Recruiting is, in fact, the essence of the approach and the perception of polarization (Sang, 2005; Katou and Budhwar, 2010; and Rathnawerera, 2010).

Recruitment strategy is the process of obtaining the appropriate number and type of human resources. This process takes place in the light of the job analysis process, the planning of human resources, and the recruitment process begins with the polarization. It includes a series of activities concerned with attracting qualified numbers of candidates for a specific job. The burdens in the recruitment process are higher for service organizations than for productive organizations. The quality of service provided depends on service providers' skills and capabilities from human resources (Heneman, 2008: 45). The importance of recruitment is highlighted by expanding the organization's future activity, that this development may require the organization's need for additional human resources. Due to lack of demand and the replacement of skills that are also new in the labor market, its position may raise its effectiveness. The recruitment process to attract social skills required high specifications to select the best of them, qualifying and training them quickly and at a lower cost after appointment in the organization (Yilmaz, 2011; Zizlavsky, 2020).

# 2.1.2. Training and Development Strategy (TDS)

The training attracts the attention of researchers, official bodies, and economic institutions in all the countries provided as the foundation needs to be available in the face of and keeping pace with economic and technological changes, and, naturally, training is the subject of the attention of many writers and economic thinkers. In particular, if to varying degrees because of its importance and achieves the goals. The training strategy is adapting training programs to develop the organization by forming the human element according to studying its reality, actual

needs, and employees' subsidiary needs (Shahnaei and Long, 2015). The processes of training and developing HR and evaluating their performance represent vital activities that are interrelated with each other. The HR managers cannot play an active role in achieving the organization's goals if they are not aware of the required training's nature based on identifying training needs according to a scientifically studied method (Amiri and Ghalbi, 2007: 600).

Dessler (2000: 249) defined training as the methods used to prepare new or existing employees with the help, they require to perform their jobs. Noe et al. (1994: 59) defined development as acquiring knowledge, skills, and behaviors that improve the employees' ability to face different types of challenges in the existing business or the realizations that have not yet appeared. Thus, training is the process by which a specific event is intended for a group of people who need it, or perhaps we need it from them, training. In general, it is a positive adjustment process with directions that deal with the individual's behavior from a professional or functional point of view. It aims to acquire the knowledge and experience individuals, or employees needed. It is also known as preparing the individual for fruitful work and maintaining it at the required service level. It is a type of guidance issued from one individual to another.

In this context, Barry (2006: 118) defined training as planned efforts, which aim to teach employees the competencies, knowledge, and skills related to the work that they are carrying out at present. The training and development processes are the skills and abilities learned and acquired during training that must be transferred to practical application while performing tasks and duties. Also, training is one of the means used by the administration to develop scientific and employees' behavioral capabilities in a manner that paves the way towards the growth, the prosperity of the organization, and facing changes at the level of the internal and external environment (Alsalam and Saleh, 2002: 129).

Katou and Budhwar (2010) argued that training provides employees with skills used directly to achieve higher performance. Also, it mentioned that training and development is an effort initiated by the organization to confirm learning and encourage the organization's members. Also includes two activities that complement each other and aim to develop human resources, to be more efficient in carrying out their work to achieve the strategic goals of the organization.

In this context, the requirements of training magnify with advances in the industry and global markets. Training enhances employees' performance by developing a sense of teamwork among the employees; hence, contributing positively to their knowledge and information about their jobs (Gruman and Saks, 2011). Therefore, training is a deliberate process of modifying the attitude, knowledge, or skillful behavior by gaining experience to achieve significant performance in one activity or group. This process in working conditions aims to develop individuals' capabilities to meet the needs of the people working in the organization at present and in the future (Casio, 2013).

On the other hand, it is difficult to overestimate the effective training process, as many systems fail (especially computer systems). Because their users are not adequately trained and could have worked efficiently without this reason, practical training is essential for effective performance (Maxwell and Lyle, 2002; Dessler, 2012). The employees' success and failure depend on their performance within organizations; thus, it is measured as the winning organizations are often more interested in training and developing their employees, knowing that they will help the employees; knowledge and eventually improve their organizational performance (Liao and Chang 2004).

Training is a systematic process aimed at preparing qualified human elements, or employees in various administrative, professional, and technical fields, providing the productive sectors with their needs from these elements, developing and raising their efficiency. Training is based on three main dimensions: the trainer, the trainee, and the training programs that include materials, processes, methods, and other physical and cognitive aspects (Abdullah et al., 2020). Training that provides innovative information helps to identify employees and helps improve employee performance in line with the changing requirements of the organization, industry, and the market. Training positively affects employee performance, so organizations focus more on training and developing employees to improve their performance and obtain a competitive advantage in the market (Ellinger et al., 2003).

According to Arnold (2010), the development strategy is to increase the workforce's knowledge, skills, and capabilities to work in all areas to raise their productive efficiency to the maximum possible extent. In this regard, developing strategies for HRM is based on the directives of the general plan of HR; thus, the

department of human resources draws complete process for its future functions and practices from attracting, selecting, appointing, evaluating, training, and designing business, and motivating employees. In an integrated manner with the strategic points of other departments and in line with the organization's strategic objectives (Caliskan, 2010; Collings et al., 2010).

#### 2.1.3. Performance Evaluation Strategy (PES)

Performance evaluation is a critical management function; hence, it is the key to continuous improvement in appraising and estimating the organization's performance. Many organizations have realized the importance of constant evaluation and various performance appraisal systems (Shaemi, 2013). Performance evaluation is the process that includes measuring and evaluating employees' performance results and the work they do. Performance appraisal is linked to opportunities for promotion and career clarity. It is a catalyst for further learning and development to keep pace with the broader and more complex requirements of higher positions on the administrative ladder, retain workers in organizations, and avoid wasting minds (Werner, 2012: 28).

Performance evaluation means studying employee performance for their work and observing their behavior while at work to judge the extent of their success and level of efficiency in carrying out their current job. And, to evaluate the potential for growth and advancement of the individual in the future and bearing more significant responsibilities or promotion to another position (Richar and Johnson, 2004).

Shahnaei and Long (2015) also defined performance appraisal as determining the degree of application of several performances and administrative standards to the employees through a systematic scientific system. That includes setting general foundations and rules for all jobs subject to measurement and setting special powers that consider the various disciplines, experiences, and nature of work.

Ruwan (2007) mentioned performance appraisal and reward are vital for organizations since it plays a significant role in refining operations in the companies by growing efficiency. Companies and organizations can develop desirable employee attitudes and behavior over the use of evaluation mechanisms. In this context, this evaluation-based information can be used to transform selection and training

strategies to select individuals and develop their skills, who seek behavior and attitudes. Though, the effectiveness of skilled employees' will be inadequate unless they are enthusiastic about performing their jobs (Sani, 2012: 10). While Teseema and Soeters (2006), in their research, found a positive link between the evaluation of performance and employee performance.

## 2.1.4. Compensation and Rewards Strategy (CRS)

The HRM, through compensation and rewards strategy (CRS), designs the systems based on which compensation and rewards are set for the human resources that work in the organization, according to objective and fair principles and rules. This group includes the financial compensation system and the incentive system (Das et al., 2018). According to Shahnaei and Long (2015), compensation and rewards are drivers for employees to take risks and think creatively for new and successful product and process creation, adding to organizational innovation performance.

Leonard (1990) stated that businesses that follow long-term incentive strategies obtain more revenue on property rights than those that ignore such strategies. Companies can influence employee motivation in some ways. Mainly using compensation based on performance to offer employees rewards for achieving the company's set goals and objectives. A wide range of businesses suggested that incentive affects company performance (Milkovich and Boudreau, 1998; Sani, 2012: 10). In this context, Teseema and Soeters (2006) found a positive relationship between compensation/ rewards strategies and employee perceived performance. The compensation system motivated employees, which in turn increases organizational innovation. External sourcing is used in recruitment for grabbing the right employees for the firm who are competent (Mumford, 2000).

Compensation and benefits include all financial payments, rewards, and non-monetary benefits that the organization provides to employees to attract qualified human resources and maintain what is available in the organization. Compensation is considered one of the most critical factors that affect individuals' motivation to grow, develop and continue the learning process, and a catalyst for more productivity and the pursuit of improving the organization's performance (Casio, 2013: 33). Shahzad et al. (2008), in their research, the researchers found a positive correlation between compensation/reward strategies and college teacher performance. Thus, top

management believes that if compensation practices are not adopted and ignored on an ongoing basis; teacher performance will decline miserably.

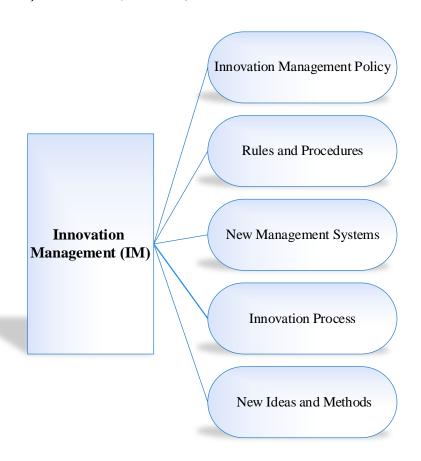
Therefore, it becomes clear that HRMS in organizations performs many consecutive and interrelated strategic functions and tasks, which depend on each other, starting with the recruitment function, and what it includes of analysis and description of jobs, recruitment, planning, selection, and assignment of human resources. Through concerned with training and developing human resources overtraining career planning, and performance evaluation. Besides, the compensation function begins by designing compensation, rewards, and incentives systems, followed by the human resources maintenance function. Where HRMS aimed to provide health and safety for human resources working in the organization, ending with a group of functions related to human resource relations and labor relations. That all these functions ultimately aim to provide effective and distinguished human resources capable of achieving the goals of the organization in the long and short term.

# 2.2. The Literature on Innovation Management

Innovation is a complicated and risky process; besides, managers dealing with innovation management have to be aware of the complexity, that the process has a lack of clarity and agreement among the innovation managers on the strategies and actions for ensuring organizational capability, a bunch of normative theories prescribed different sets of rules and techniques to increase organizational innovation (Karakaş et al., 2017). However, advanced management literature is yet to see a dominant theory (Wolfe, 1994; Lam, 2004), see (Figure 2.2.)

Innovation is not easy to learn from addresses, publications, or others. Management leaders' doctrine inspires it in developing the operational and service environment, providing resources and capabilities to innovative employees and providing them with moral and material incentives, adopting their ideas, applying them, supporting them financially and morally, and registering patents of innovation or invention because the enlightened mind is the origin of all progress and development (Razavi and Attarnezhad, 2013).

In the same regard, Razavi and Attarnezhad (2013) stated that several models had been demonstrated to dissect innovation at the company level using a range of theories, including resource-based view (RBV), market orientation (MO), sociotechnical approaches, and transaction cost economics. Also, cognitive theories, especially institutional theory. Using many diverse theories is that the results of theories bring diverse innovation puzzles and do not suggest a complete outline of factors that must be taken into account to manage innovation properly. While some theories emphasized specific companies or the industrial context, other theories focused on the nature of the organizational structure and administrative complexities in general. Innovation is the period in which knowledge gained commercial value through the modification, consolidation, or synthesis of information in the form of the new source, product, process, service, management technique, or technology that creates original, correlated, unique solutions, and value to fulfill organizational functions (Altuntaş and Dönmez, 2010: 53).



**Figure 2.2.** The Elements of Innovation Management **Source:** By the researcher based on reviewed literature related to innovation management.

Innovation is a generic term, hence, creation, development, the introduction of new products/services, or a new procedure or process for doing things to benefit one or more of the organization (Albury, 2005: 51). Innovation is commonly measured to present or develop products, processes, defining, or redefining market positioning, or altering the firm's dominant paradigm. Therefore, innovation initiatives tend to depend heavily on employees' knowledge, expertise, and commitment as key inputs in the value creation process (Tidd et al., 2005).

Hence, innovation is a critical factor for organizations to create sustainable competitive value and advantage in today's complex and changing environment. Organizations with more innovation and response to changing environments and creating new capabilities will be more successful, allowing them to perform better. Innovation is significant for the organization's future to understand the growing and changing markets. Innovation is significant because it can provide a sustainable competitive advantage (Weerawardena et al., 2009). Most organizations face abundant competitive problems in their environment, and such problems are because of rapid changes in the environment, especially technological changes. In this regard, managers and employees have to use the power of creativity and innovation to adapt and keep pace with rapid changes, product lines, management practices, and production processes (Hazlett et al., 2005).

According to Tidd et al. (2007: 13), innovation is a process that turns new ideas into opportunities and puts these into widely accepted practices. Schermerhorn (1997: 377) defines it as 'the process of creating new ideas and putting them into practice,' stressing that the best innovative universities are those that come up with any good ideas and then be able to implement them successfully. The invention has become an essential element in achieving sustainable competitive advantage. It is an essential means to ensure the organization's survival and competition considering the fierce global competition and the rapid changes in various scientific and intellectual fields. The invention is of great importance at the organization's level by achieving the leader's permanent extension in supporting the ability to develop the new product or process successfully (Trott, 2005: 5).

Innovation can alter the distribution of power, the systems, and the structures of established organizations (Shane and Lau, 1996). However, organization members cannot know in advance the direction and magnitude of changes imposed by the

innovation process since they cannot foresee the development of technical standards or the products and processes that will gain acceptance (Venkataraman et al., 1992). The innovation process's capacity to impose unexpected changes on organization members creates resistance to new ideas by many organization members uncomfortable with its uncertainty. The ability entrance innovation holds classifications that focus on opportunities or innovative capacity and mental preparations that individuals have, like independence, pursue the truth, and the need for achievement (Goyal and Pitt, 2007).

Although, Smith et al. (2010: 435) consider a successful innovation to be a new approach that brings an improved result. These innovations can be small or large, most recognizable, or entirely new and different. As innovation writer and professor Christensen describes, some innovations are disruptive, while others are considered satisfying. The ability to innovate has always been one of the factors contributing to the success of the organization. The organizations that dispose of the necessary resources, the intense drive to innovate, and the organizational climate that will allow and encourage innovative ideas are precisely those that will innovate quickly and successfully. Therefore, the ability to innovate represents the ability to continue innovation in knowledge, and ideas are complex and multidimensional because many factors interact to make this process possible (Das et al., 2018).

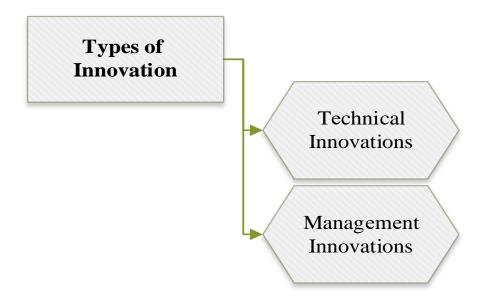
Therefore, often the literature indicates that the terms innovation and creativity have the same meaning. However, some specialists' authors tend to differentiate between the two terms, innovation discovery unique new idea, creativity relates to putting this idea into practice in the form of a process or product or service offered by the institution to its clients. Creativity has been used in many types of research in synonyms of innovation, and some have argued that the distinction between the two terms is related to their expression rather than the substantive differences between them (Tidd et al., 2005; Trott, 2005; and Thomas, 2011). The researcher believes that there is a strong relationship between creativity and innovation, innovation is the product of creativity, and there is no creativity without innovation; innovation helps to put creative ideas into practice.

# 2.2.1. Types of Innovation

There is no doubt that innovation is the most prominent feature in the lives of individuals, institutions, and organizations. Since then, this evolution has accumulated at varying rates because of the tremendous mental ability that man has over all other beings that this earth shares, capable of developing and inventing new things. As Quintana and Ciurana (2011: 30) mentioned, there are two types of innovation. The first is innovation talent; it depends on individual abilities to show their products in great works. Second is the innovation of self-realization: expressing ideas without fear of ridicule of others and continuously, and this kind of innovation is synonymous with sound mental health, becoming a characteristic of the integrated human being. Innovation as new products, the innovative process creates a new product due to its interaction in a distinctive style and what it faces in the environment.

Regarding innovation as a mental process, Albury (2005) states that innovation is the process that involves a sense of problems and gaps in a field, then renewing some ideas, and hypotheses that address these problems, testing the validity of error of these assumptions, and communicating the results to others.

Al-Saidi et al. (2013) described innovation as a dynamic mental process requiring that innovative thinking be one of its inputs to develop new ideas or create new uses for existing products, emphasizing that innovation should be better. The dynamics of innovation can be described as a cycle of innovation and change so that this cycle is not linear—finally, innovation in labor relations often changes. There are three broad divisions of innovation: Organizational structure arrangements, so innovation management is a first or first change, hence, innovation in making and applying knowledge (innovation) into two types: (Technical innovations and Management innovations).



**Figure 2.3.** Types of Innovation

**Source:** By the researcher based on reviewed literature related to innovation management.

# 2.2.2. The Concept of Innovation Management

According to the concept presented by Birkinshaw and Hamel (2008: 825), innovation is principles, processes, and management practices that ultimately change the actual process of what managers do and the way they do it. Besides, the concept of innovation as rational decision-making processes, the human mind's development, and the organizational structure's development affect innovative thinking's essential aspects. In creative thinking, the leader's ability to visualize distant and close results and invent solutions are evident. The creative leader does were not rely on traditional solutions. He/she has the courage and the ability to take new ideas and solutions that differ from conventional and traditional. Innovation management is the means of organizations abandoning outdated traditions and ruminating over-consuming organizational contexts, dealing with the spirit of change and managing it successfully so that they can confront and withstand, and give the vitality required for continuity and success (Trott, 2005: 5).

Innovation management aims to improve relations between individuals and interact with each other to accomplish their respective organizations' tasks or objectives. It is also concerned with administrative roles, procedures, and structures

related to communication and interaction between individuals. It includes administrative building creativity and organizational rules and tools procedures and redesigning work alongside creative activities (Johnston et al., 2012).

However, in general, it can be argued that innovation is creative idea involving implementation and different from the invention, a process of conceptualization, and implementation of a new way to achieve the result and performance of work. Thus, innovation administrative in the public sector can also be defined as; Public institutions develop new policy designs and new standardized work procedures to address public policy problems. Hence, public administration innovation is a successful, creative, and unique solution to new problems or a new solution to old problems (United Nations, 2006: 11). Innovation management is an increasingly covered topic in scientific and management literature over the past 35 years; the reason for this interest is likely to be the realization that innovation is of crucial importance for survival organizations that need to improve their services (Hartley 2005; Albury 2003).

Jacobs and Snijders (2008) defined innovation management as developing and selecting innovative ideas and transforming them into innovation. However, in Cooper's words, "it is war: Innovate or die" (Cooper, 1984: 247), so innovation management can be defined as a difference in the form, quality, or state overtime of the management activities in an organization, where the change is a novel or unprecedented departure from the past (Hargrave, and Ven, 2006).

Thus, innovation management is the process that encompasses the whole range of decisions, activities, and measures in order to facilitate the transfer of an idea into business value. This process can be applied to all kinds of ideas, whether about a product, process, or service. The focus of innovation management is to provide a set of measures and tools that will facilitate the inventors to respond to the whole innovation cycle's challenges and turn their ideas into successful innovations (Karakaş et al., 2017). Hence, innovative organizations often employ an idea management system. Idea management is the practice of handling ideas in a structured fashion. It is the aim to select the best ideas with the most potential for further development and implementation (Goyal and Pitt, 2007).

## 2.2.3. Innovation Management Importance

Nowadays, in a rapidly changing business environment, innovation has become essential for survival and the survival of the organization or institution a significant objective. The organization that cannot innovate in its face – definitely – significant and complex challenges as its competitors do innovation and continuous improvement of their products and services and operations. This innovation prioritizes all areas without exception for survival, and innovation has many studies in the second half of the twentieth century. At the highest level, innovation is one of the essential human qualities that change history. Society cannot be changed qualitatively through planning, but the work of creators.

Regarding the importance of creative people (Conant, 1964: 213) refers to any of the creators, are not offset by ten men, second class in science. It is pointless to give the man of the second class the task of solving the first level's problem. Therefore, the talented and creative are now the greatest hope in solving the problems that threaten humanity, which varied in quantity and quality, and became talented in any society are the national wealth and the energy driving towards civilization and progress. Human wealth is a critical factor of change and development and progress, through the talented and creative. However, to reach modern inventions in various fields and fields, civilizations flourished, and humanity made great strides forward.

Learning is the fundamental basis for innovation, and learning can be innovative, which is what Drucker (1985: 30) called innovative tradition. Learning transforms innovation from a specialized activity and an individual practice of the innovator. Drucker emphasized what he called adaptive learning of behavioral learning organization Senge exercise as a whole and the Singh by responding to organizations' events, representing the first step towards a learning organization. The most critical learning point Singh is supporting the organization and assist in the overall process of change and change the assumptions and its foundations. Moreover, it certainly cannot be a clear perception of workers, and their ability to develop the organization, departments or senior management alone is not responsible for this development and innovation alone. Stewart and Fenn (2006) noted that innovation is

a competitive advantage in the long run that helps create ideas and define goals used to define a future vision.

#### 2.2.4. The Innovation Management Elements and Stages

According to Nasr (2008: 27), innovation management consists of three essential elements as, first creative thinking skills, so, having the leader of this skill enables him or her to break out of the traditional range of thinking and to gather the highest number of good, unique and unexpected ideas in order to identify the problem accurately, approach it, and make the leader more sensitive to problems. Second is experience, which contains knowledge, understanding, and represents the background that enables managerial leaders to reach creative solutions, which make their ideas more powerful and push others to adopt the vision of the leader at work (Abualoush et al., 2018).

As well as this knowledge helps them in their professional lives as decision-makers. So, the experience is a vital dimension of the dimensions of innovation as the lack of availability drives administrative leaders to kill new ideas instead of strengthening them, and not understanding the innovative behavior of some of their professors, reflected in their failure to strengthen innovative ways of teaching because they see it as waste and waste of time. Finally, innovation requires intensive behavior from the leader—a motive stem from a person's desire to reach the optimal solution by exploiting opportunities (Titi, 2001: 55).

Several scholars have discussed innovation and emphasized the significant role of innovation and creativity in the future success of an organization. Most research has roughly the same framework for interpreting these terms. They defined innovation that refers to the later stage of implementing ideas toward better procedures, practices, or products (Olsson et al., 2019). Consequently, to achieve innovation management and achieve its objectives, there must be three core innovations that; the skills of creative thinking, experience, and motivation, and no shortage or loss of one could affect the work of the creative leader and land targets. If these essential ingredients, but there are a set of principles is necessary. Innovation management, as a process, goes through multiple stages or steps until its end. First is

the preparation stage; in this stage, the problem will be identified, and all related aspects will be identified, compared with similar problems, and the methods of their previous solutions will be identified for use in solving problem solutions (Nasr, 2008: 28).

Second is the incubation stage; at this stage, the individual leaves the problem or position and turns away from it to another position or activity to leave room for ideas to brew in his mind (Titi, 2001: 56). The third is the Illumination stage; this represents the sudden drop off the idea to the mind (Jarwan, 2008: 95). The fourth is the verification stage to verify the accuracy of the solution or the production reached in the light of known or logical facts or the light of the experiments (Titi, 2001: 56).

# 2.3. Theoretical Aspect of Employee Performance

Employee performance from the administrative point of view is defined as carrying out the job burdens of responsibilities and duties according to the rate that is required to be performed by the qualified, trained worker. A fair relationship between them, and to be the ability to promote the employee performance, and this depends on the performance reports, i.e., obtaining data that will help in analyzing, understanding, and evaluating the employee performance (Abdullah et al., 2020; Pradhan and Jena, 2017).

An employee's performance is the activity that is carried by an individual or group in an organization that can achieve qualitatively and quantitatively (Robbins and Judge 2017). All activities to enhance the business of the organization are a form of performance. Accomplishment in reaching superior performance needs the strategic role of employees as players in every activity of the organization (Raineri, 2017). The performance includes the resulting outcomes of the performed actions of employees based on their expertise and skills. In organizational settings, employees' performance accumulates due to all the employees' skills, efforts, and abilities contributing to improved organizational productivity leading towards its goal achievement.

Improved organizational performance indicates goal achievement efforts while requiring more effort to improve employee performance (Ellinger et al., 2003).

Employee performance is a set of behavioral results, which contribute to achieving the organizational goals, considering the performance of the specified tasks using the available resources also taking care of some other variables, such as success in maintaining good internal relationships, absenteeism, leaving the organization, misuse of resources, and other risky behaviors in the workplace (Singh and Agarwal, 2011).

Employee performance is a significant factor in any organization's remain and success. Thus, in the current business era of rapid, unpredictable technological and environmental factors change, organizations must develop their employee performance to meet the demands and challenges related to the market. The development of business performance can be at the organizational and individual levels (Jung and Avolio, 1999; Jabeen, 2017).

Petty et al. (1999) indicated that the employee's performance is associated with overall job satisfaction. Therefore, if the employee is pleased with the work environment and the workplace, particularly with a supervisor or leader, the performance has improved significantly. Thus, leadership within HR management has a significant impact on employee performance and innovation; when employees are satisfied with their dependable organization and leadership, they are passionate about innovation and good performance.

In this context, Aguinis (2009) argued that employee performance comprises the outcomes of employee behavior and the behaviors themselves. Employees' performance is about what the employees do, not about what the employees produce or their work results. Employee performance represents the employee's general belief about his behavior and contributions to the organization's success. Al-Saidi et al. (2013), employee performance also means that the employees use their skills, abilities, and motives to perform specific tasks, whether they are included in job description cards or work contracts. A set of other additional roles is based on the employee's willingness, such as helping new employees and providing new innovative ideas (Schoorman et al., 2007).

Employee performance is among the significant factors that contribute significantly to the success of the organization. Learning organizations play an essential role in enhancing employee performance by providing training and development (Gitongu et al., 2016). Moreover, management standards for evaluating employee performance also play a crucial role in improving employee performance as it provides a picture of actual performance and aligns it with standards. If discrepancies are found, these standards will help return the outputs to the required levels (Mackay et al., 2004).

The performance of the employees also depends on their internal satisfaction with their work. If employees are satisfied with their job and the organization, they are more interested in doing their job well towards achieving organizational goals (Harter et al., 2002). The first stage of increasing success and performance in enterprises is through intra-organizational socialization. It aimed to adopt an organization with socialization and become active (Can et al., 2009). Employees in businesses should be in coordination with each other. Socialization is essential to ensure that work does not stop; it is healthy communication and peace. As the organization's sociability cannot occur, the managers should provide appropriate environments for organizational innovation activities (Pradhan and Jena, 2017).

Today's institutions face new challenges that impose them to compare their performance and achievements with others. More successful institutions reach the market and what is expressed compared to the installment. This idea developed under the influence of global competition and the desire to achieve the best performance levels, and then the idea of the international level of performance emerged (Chien et al., 2020).

Thus, performance related to employees is the focus around which the efforts of managers are focused, as it constitutes with distinction the most important objectives of the organization, where the efficiency of the employee performance of any organization and in any sector depends on the efficiency of the performance of its human resources, which are supposed to perform the functions assigned to it effectively (Desa and Asaari, 2020). So that organizations ensure that the HRM in it exercises an important and complex function at the same time as one of its functions, namely, the function of evaluating the performance of employees, and it is a function as old as history, which has evolved and crystallized more with time to become a specialized function with rules and assets, supervised by individuals trained on its performance, and it uses official standards that are set on a scientific and objective

basis, and they are a job that mediates the functions of human resources management, providing them all with the necessary information to perform their roles in the direction that achieves the objectives of the organization (Anwar et al., 2015).

Carvalho et al. (2020) mentioned that employee performance can be affected by some factors, one of which is the incentive. Incentives in organizations should be a major concern in human resource management. Thus, organizations should pay attention to how to keep employees motivated and manage at work. Accordingly, the employees always focus on the organization's goals. In this regard, maintaining employee motivation is very important since the incentive is the driving force for everyone on which employees work and do something. Employees won't do things optimally if they don't have much incentive from within themselves to excel at work. It is believed said that employee performance is the degree of achieving and completing the various tasks and responsibilities that make up the job occupied by the individual and to achieve the goals of the organization, and this is through improving this performance in terms of quality, through continuous training of employees.

# 2.4. Theoretical Aspect of Organizational Performance

Most researchers agree that organizational performance results from the strategy formulation process. The organization pursues to achieve its long-term mission and goals by making performance distinct from its competitors. Armstrong (2001: 468) defined performance as the results of the accomplished work, and the Oxford Dictionary defines it as' the achievement, implementation, and achievement of actions undertaken, or assigned to be executed.

In the same context, Al-Saidi et al. (2013) stated that if the organization wants to achieve a competitive advantage, it must manage its employees' behavior and results through performance evaluation to identify their performance efficiency. Robbins and Genzo (1996: 327) defined the steps of the organizational performance process by determining the standard performance of working individuals, which is represented by the type and quantity of outputs, effectiveness in how resources are

used, the method of performance, and the appropriate timing, desired results, as well as setting shared goals and measuring the actual performance and comparing it. With benchmark performance and then discuss it with employees.

Yavuz (2010) defined organizational performance as an indicator of success while evaluating various elements. The overall result of appraising the divisions as the marketing of products in the organization shows its performance. In general, regeneration performance, market performance, production performance, and financial performance measure organizational performance. In this way, the results expected from different divisions demonstrate organizational performance.

Kotler (2000: 40) explained that the organizational performance is determined by the alignment between the strategies established and the stakeholders (customers, workers, suppliers, suppliers) by improving the operations of the organization through the allocation of resources (human, financial, operational and informatics) from through effective management, capable of investing intellectual energies, and the organization's achievement of superior or distinct performance.

Organizational performance is one of the terms that suggest separating good work from bad work. Therefore, organizational performance has become one of the basic concepts for managers at all organizational levels. The outputs of this performance may have detrimental effects on the organization's profits or maybe the basis for its survival, growth, and strengthening of competitiveness (Ahmed et al., 2008).

Performance has also been defined as the procedures and behaviors people monitor and contribute to achieving the organization's goals (Hattrup and Rock, 2002: 25). Organizational performance highlights that it is necessary to determine the current position and its distance from its desired ends. The extent to which they are applied together and inspect the organization's operations and identify its performance is essential to understand how organizations work to correct deviations in the organization and raise performance. Besides, design the organizational structure in a manner that is effective and efficient and identify the need for change and make it in the organization (Gitongu et al., 2016).

Koser et al. (2018) argued that organizational performance represents the desired output to be achieved by the organization, based solely on the positive

aspects of performance results, assuming the organization's ability to achieve a high level of performance, and since organizational performance is seen as the result of various activities and actions carried out by the organization, its measurement is determined by the factors affecting it and the extent to which the organization can achieve its objectives through it.

Kotler (2000: 40) explained that organizational performance is a broad concept, and its variables are specific that any organization's components are designed and developed, so the difference in the performance of the difference in standards and measures adopted to measure performance by managers and organizations. Organizational performance has therefore become one of the main concepts for managers at all organizational levels. The results of this performance may have negative effects on the organization's profits, or perhaps the basis for growth, enhancing competitiveness (Ahmed et al., 2008).

It is believed that organizational performance is evident from the fact that it expresses the highest performance level. That is the organization's primary goal through its use of various resources with the highest efficiency. That exceeds the ability of its competitors to perform the same performance under similar circumstances sufficient. As mentioned, performance is referred to conducting activities and tasks that make up the work, and it results from the combination of several elements that will affect performance negatively or positively. These elements are called determinants of performance (Ali et al., 2019):

- a) The first determinant is effort, which is resulting from the individual obtaining the support (motivation) for the physical and mental energies that the individual exerts to perform the task.
- b) The second is abilities, which means the personal characteristics used to perform the job.
- c) The third is the role of task awareness, which means the direction in which the individual believes that it is necessary to direct his efforts to work through it, and the activities and behavior that the individual believes are important in performing his tasks define role awareness.

Furthermore, Gitongu et al. (2016) emphasize that it is essential to define the current situation and its distance from its desired ends. The extent of applying them

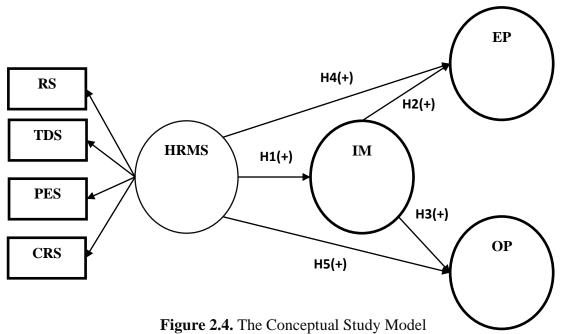
together examining the organization's operations and determining its performance is essential to understanding how organizations work to correct deviations in the organization and raise performance. Besides, designing the organizational structure effectively and efficiently identifies the need for change and makes it into the organization

## 2.5. The Study Model

Various significant study models of HRMS have emerged during the past century, making innovation management extremely fundamental to organizational performance and success (Goyal and Pitt, 2007); however, modern strategic thinking involves HRMS and innovation management on organizational performance. Wong et al. (2013) constructed a model and found that HRM affects business organizational performance through its intermediate effect on innovation and environmental management.

Sabiu et al. (2019), in their research model, examined HRM practices, ethical climates, and organizational performance. Shahnaei and Long (2015) examined the improvement of innovation performance through HR in organizational performance. The research showed that the major driving factor for innovation is human capital, and hence human capital needs constant monitoring by managers. The culture of innovation is the key to business success, and thus an effective manager should be successful in managing his human capital.

Therefore, the literature reviewed on HRM strategies, innovation management, employee, and organizational performance resulted in the study model's crystallization, which was also formulated in light of the study problem and its objectives. The study model (Figure 2.4) is based on independent, mediation, and dependent variables. The independent variable is human resource management strategies (HRMS), and the mediation variable is innovation management (IM), which is subject to examination. In this study, the dependent variables are employee performance (EP) and organizational performance (OP); accordingly, the following hypotheses will be developed.



**Note:** HRMS=human resource management strategies, RS= recruitment strategy, TDS= training and development strategy, PES= performance evaluation strategy, CRS= compensation and rewards strategies, IM= innovation management, EP= employee performance, and OP= organizational performance.

# 2.6. Theoretical Underpinnings and Hypotheses Development

## 2.6.1. The Relationship Between HRMS and Innovation Management

Organizational innovation represents the human capital of the organization and is essential to the success of business organizations. Since organizational innovation is an important asset that the company should strive to preserve. Consequently, the HRM must anticipate the staffing needs of the business in the future while recruiting, hiring, and retaining the best talent in the organization. The most successful companies pride themselves on employing the best talent. To do this effectively, the HR department needs to identify the different competencies required for each job, such as the skills, abilities, and knowledge required to perform the various tasks effectively (Dharmasiri, 2009).

In this context, Salaman et al. (2005) indicated that human resource management strategies are still one of the powerful and influential ideas that have emerged in business and management over the past 25 years. Human resource management strategies are represented by the leading and basic philosophy of

managing and organizing individuals and translating that into policies and practices that achieve cooperation and harmony between everyone within the organization. Thus, HRM strategies have become one of the most critical strategies for achieving high performance, competitive positions, and innovation (Singh, 2004). Behind the success of every successful organization stands successful human resource management in its programs, whether these programs are selecting individuals, training them, evaluating their performance, or through good reward and incentive programs (Khan, 2010).

From this standpoint, the HR department began to transform from being a function concerned with specialized affairs for working individuals whose function is to provide consultations in this field to an executive administration that has a significant and comprehensive role throughout the organization through strategic planning for HR, as the director of human resources became one of the members who are concerned with formulating HRM strategy (Wan et al., 2002).

Lin (2011) examined HRM and innovation: the roles of information technology and virtual organizational structure. The researcher argued that HR managers could achieve their goals with the analyzed information produced by IT. HRM has entered the e-HRM era with features of self-service and intranet-based. Since e-HRM is obtaining more attention currently, it is necessary to introduce e-HRM in working organizations. The results showed that HRM positively affects organizational innovation.

In recent years, the relationship between HRM and innovation has been explored from various angles. This research has taken one direction that HRM systems in general or HRM systems are comprised of specific practices that indirectly influence innovation capacity. For instance, empirical studies support the contention that HRM influences mechanisms such as developing and exploiting intellectual capital (Wright et al., 2001), knowledge creation, and new product development (Collins and Smith 2006). In this context, research conducted by Shipton et al. (2006) showed that training, appraisal, and induction impact innovation, but that the influence of these practices may differ according to the types of innovation activities (i.e., exploitative vs. explorative).

Laursen and Mahnke (2001) provided one of the few empirical contributions: Based on survey data that suggest that large Danish companies in the manufacturing and services sectors following innovation and knowledge strategies tend to use "new HRM" practices that include interdisciplinary workgroups, quality circles, planned job rotation, the entrustment of responsibility, combination of functions, performance-related pay, and internal and external training. More traditional HRM practices such as staffing and career development were not included in the study by design.

Shahnaei and Long (2015) studied the development of innovation performance through HR in organizational performance. The results showed that an innovation framework promotion model in organizations' behavior impacts its innovation strategies from technical and administrative aspects. It is further revealed that the association between human capital and innovation strategies is complex and needs further research in the future.

Zehir (2016) explored the effect of HRMS practices on innovation performance. The study was collected by using a questionnaire that was distributed to managers working in Islamic banks in Turkey. The results showed that HRMS positively impacted innovation performance. Seeck and Diehl (2017) analyzed the impact of HRM on innovation. The finding showed the impact of HRM practices, which can be firmly linked to innovation. The role of high-commitment practice bundles appears particularly important. Studies on the various individual practices indicate that practices that foster employee commitment, loyalty, learning, and intrinsic motivation are conducive to innovation.

Zizlavsky (2020) investigated HRM strategies and the process of innovation. The results showed the importance of strategic HR within the framework of organizational innovation. Also found the influence of human resources on the individual and group level of thinking. At the individual and group level, the levels displayed factors and phenomena that could increase or decrease the innovative performance and activities. At the group level, it showed the characteristics of highly effective teams in the organizations. Based on the positive correlation between Human Resource Management Strategies (HRMS) and innovation management, the following hypothesis is predicted:

H1: Human Resource Management Strategies (HRMS) in terms of (recruitment strategy RS, training and development strategy TDS, performance evaluation strategy PES, compensation, and rewards strategy CRS) positively and significantly contribute to the rise of Innovation Management (IM) in the investment boards in North Iraq.

# 2.6.2. The Relationship Between Innovation, Employee, and Organizational Performance

Some researchers have developed theoretical models and concepts to explain the relationship between innovation management and organizational performance. There is a clear suggestion from empirical studies that innovation management positively connects with organizational performance (Li and Atuahene, 2001; Jiménez and Sanz-Valle, 2008; Das et al., 2018). The literature related to innovation and performance continually claims that companies' innovation impacts financial and organizational performance (Das et al., 2018). However, new product design, development, and unique service placement can also raise company profitability and organizational performance (Tajeddini, 2016). When innovation is active in organizations attempting to invent, change the status quo, and improve products, procedures, and knowledge (Zhao and Ordonez, 2009).

Farhang et al. (2018) investigated the impact of organizational innovation on manufacturing companies' performance in Iran, mainly studying the Rasht industrials park (RIP) through innovation capabilities in process and product. The results showed that organizational innovation is related to organizational performance through process innovation capabilities. The results also presented that organizational innovation is associated with the process of innovation capabilities.

In their research, Al-Saidi et al. (2013) investigated the role of innovation management approaches in enhancing performance. The research adopted existing research and dimensional analysis methodology to collect, interpret, and test the phenomenon. As a result, the study found a significant correlation between innovation management and performance—accordingly, researchers recommend that supporting and encouraging creative competition is necessary among the factory teams.

Karakaş et al. (2017), in their research, investigated the impact of innovation on organizational performance to determine how occupational executives perceive innovation activities and assess their effects on performance. They used a survey questionnaire to obtain empirical data from hotel companies. The results found it necessary to emphasize innovative exercises to keep pace with the market. It also found that innovation activities affect performance. The study results can support Turkish tourism companies in adopting innovative technologies, developing better strategies, and making them innovative tourism services providers. Therefore, based on the above literature and positive relationships between innovation, employee, and organizational performance, the following hypotheses are predicted:

*H2:* Innovation management is positively and significantly related to employee performance of investment projects in North Iraq.

*H3:* Innovation management is positively and significantly related to the organizational performance of investment projects in North Iraq.

## 2.6.3. The Relationship Between HRMS and Employee Performance

Vast researchers have also studied the relationship between HRM and employee performance. Today's HRMS is a practical approach to employee management that aims to achieve a competitive advantage over the strategic improvement of dedicated and competent workers through an integrated set of cultural, structural, and HR technologies. An effective HRM program in the organization would enable employees to contribute effectively and meaningfully to their goals and objectives. It makes the employees committed to their work and evokes a positive behavior that will increase the organization's effectiveness. An effective HRMS in the organization will also discourage employees from showing undesirable behavior such as deviant organizational behavior and counterproductive behavior (Sabiu et al., 2019).

Davies et al. (2001) investigated HRM's effect, namely compensation, training, development, and performance evaluation, on employees' performance in Australia's accommodation industry. The study showed that of these practices, training appeared to improve employee performance significantly. Whereas performance appraisal and compensation seemed to have no significant influence on

performance, which can be characterized by the fact that employees in this sector consider their job temporary, hence increased wages do not augment employee commitment.

Shahzad et al. (2008) surveyed the influence of HRM on university teachers' performance in Pakistan by applying correlation analysis. The results showed that compensation practices are strongly associated with the teacher's performance, whereas promotion practices are also substantial. The study found no significant association between performance evaluation practices and employee performance. The study suggested that the performance evaluation system is in needs to be revised.

In the Indian banking sector, research was conducted by Mittal and Khera (2010) to examine HRM and its influence on employees' performance in commercial banks in India. The study dealt with 17 practices, including recruitment and selection, motivation, employee participation, planning, compensation, development, and training. The researchers obtained empirical data from 184 administrative employees in three banks (a foreign bank, a private bank, and a public sector bank). For data analysis, the multiple linear regression method and the correlation coefficient were also used. The results showed a strong relationship between HRM and employee performance.

Gyensare and Asare (2012) studied HRM practices' influence on nursing staff's performance in Ghana's mental hospitals. The study's findings confirmed that the successful execution of compensation, promotion, and performance evaluation practices significantly enhances the nursing staff's performance in Ghana hospitals. In Iran, research conducted by Khatibi et al. (2012) investigates HRM and influences employee performance. Researchers obtained survey samples from 9 hospitals. They also distributed questionnaires among individuals the nursing professionals employed in 5 public hospitals and four private hospitals. The results revealed that HRM positively impacts employee performance; results also presented that compensation substantially affected employee performance.

Hamad (2013) examined the role of human resource management strategy on employee performance. The study relied on a questionnaire tool for data collection from the Sudanese Telecommunications Company Limited, in addition to personal interviews. The final 150 questionnaires were distributed, from which 126

questionnaires were valid for analysis. The study showed that human resource management strategies positively and significantly impacted employee performance. The study also showed that constantly changing the working environment affects the company's ability to adopt a strategic view of human resources management. Furthermore, in Tunisia, research was conducted by Jery (2013), who examined strategic HRM and performance. In this research, a holistic approach was used, and a qualitative methodology was also applied. The results found that HRM strategies contribute to the development of the human resource function, consider human capital as one of the organization's assets, and positively impact HRMS in improving employee job performance. Accordingly, the positive relationship between HRM and employee performance is predicted in the following hypothesis:

*H4:* HRMS positively and significantly contributes to improving the investment board's employee performance in North Iraq.

# 2.6.4. The Relationship Between HRMS and Organizational Performance

HRM researchers like (Collins and Smith, 2006; Subramony, 2009; and Koser et al., 2018) investigated HRM and organizational performance and highlighted the positive relationship between HRM strategies (employee recruitment, staff development, performance management, and compensation and benefits) and organizational performance. In Taiwan and Sang (2005) examined the association between HRM and the perception of organizational performance. The research obtained empirical data from managers in both Taiwan and Cambodia. The study concluded that human resources strategies, such as recruitment, compensation, incentives, teamwork, training, and employee security, positively impacted organizational performance's financial and non-financial dimensions.

Gooderham et al. (2006) examined the influence of HRM practices on European firms' performance. To reach a research purpose, the researcher investigated 3,281 companies in the EU and used data derived from the Cranet data set. However, factor analysis was also used for 80 different HRM practices, classified as either computational, collaborative, or intermediate. The results showed that five of the six practices had a significant influence on these companies' performance.

Ogbonna and Harris (2006) examined the impact of HRM strategies on organizational performance. They analyzed whether this relationship is mediated by market orientation using a sample of 1000 firms in multiple industries in the UK. The study's findings suggested that HRMS and market orientation are significant in enhancing organization performance; however, HRMS's impact is not direct. Highly developed HRMS practices in an organization lead to market orientation, which consequently affects overall performance. Wan et al. (2002) investigated strategies of HRM and organizational performance. As they mentioned, this research was conducted in 191 Singapore companies. The results found a positive relationship between the strategies of HRM and organizational performance. The results also discuss how proper management of human capital can be a critical source of competitive advantage.

Chang and Huang (2005) explored the impact of HRMS on organizational performance in Singapore. The study categorized HRMS into six broad categories and examined how they influence firms' financial and HR performance in different industries. The results revealed that HR practices significantly impact a firm's HR performance. Moreover, recruitment, training, evaluation, and empowerment significantly affect a firm's financial performance; however, compensation and teambased work appeared insignificant.

Katou (2008) examined the effect of HRM practices on organizational performance in manufacturing companies in Greece. The study's findings suggest that HR practices do have a direct and indirect relationship with organizational outcomes. The indirect relationship between the two is mediated by HRM outcomes such as employee retention, cooperation among employees, top management, employee motivation, and job satisfaction. Moreover, the research also validated the contingency perspective that business strategies have a pivotal role in shaping HRM policies. Katou and Budhwar (2010) conducted research in the Greek industrial sector to find a causal relationship between HRM strategies and organizational performance. As a result, the study found a positive relationship between human resource management strategies: training, recruitment, promotion, employee engagement, incentives, safety, health, and organizational performance.

Ayanda and Sani (2011) examined HRM strategies' influence on public sector organizations' organizational effectiveness. The researchers mentioned the research aimed to fill in the gap in the lack of studies that dealt with the impact of human resource management strategies on public organizations. The study dealt with (255) civil servants distributed among (30) government ministries in Niger, and the researchers applied the correlation and multiple regression analysis to reach the results. The results showed that the relationship between HRM strategy practices was average with governmental organizations' performance. The study also showed that employee training was the most effective practice in public organizations' performance. Dimba (2010) aimed to build a model that illustrates the nature of the relationship between HRMS and organizational performance. The study was applied to a sample consisting of (50) multinational foreign companies operating in Kenya. The study presented that HRMS positively related to organizational performance.

Collings et al. (2010) explored the impact of HRM practices on organization performance measured in terms of the workforce's skills and motivation and its implementation in 340 companies in Turkey. The research results suggested that a company's HR practices' position to overall business objectives is a significant determinant of organizational performance. Moreover, no sole HR practice significantly affects the firm's financial performance; however, several HR practices, namely employee compensation, promotion, evaluation, and empowerment, considerably influence employee skills and motivation.

Sani (2012) examined the HRM strategies' effect on Nigeria's insurance companies' organizational performance. The results confirmed that HR practices are value-added to insurance companies; however, the research found that line managers' training is inadequate even though line managers have an essential role in implementing HRM strategies. The study also validated that the organizational climate significantly impacts the workforce's retention and performance. In their research, Rebecca et al. (2013) investigated strategic HRM's effect on organizational performance: the mediating role of high-performance HR practices. They surveyed (118) industrial and financial organizations. The results showed a significant impact of HRM strategies on human resource practices and indicated that these strategies enhance financial performance and better implement strategies.

Cania (2014) examined the impact of the human resources management strategies on the organizational performance of a group of companies operating in Albania, and the study relied on the primary and secondary sources of data (30) companies, (16) companies operating in the service sector, (14) companies working in the production sector. The results showed that the organizational performance of a group of these companies has changed because of the application of human resources management strategies, which has enabled organizations to become more competitive. The study also showed that human resources management strategies are an important tool to ensure continuity in organizations.

Finally, Akhtar et al. (2014) examined the role of HRM in organizational performance. As the researchers mentioned, they used a survey questionnaire comprising 50 indicators to collect empirical data from higher education institutions in Pakistan. The outcomes showed that HRM has a significant association with organizational performance. Thus, the positive association between HRM and organizational performance is predicted in the following hypothesis:

*H5:* HRMS positively and significantly contributes to improving the investment board's organizational performance in North Iraq.

#### **2.6.5.** Mediating Role of Innovation Management

As indicated by Damanpour and Evan (1984), the literature reveals that innovation management played a significant mediator in the effect of HRM practices on organizational performance. Heritage (2006) investigated innovation through human resources and argued that HRMS enables organizations' innovation by actively attracting, developing, and managing talents. However, the expansion of innovation activities, particularly in companies, requires pioneering and innovative employees with flexible characteristics and taking risks (Chen and Huang, 2007). Therefore, various empirical studies have established that active HRM strategies sustain competitive advantage, innovation, and organizational performance. Krasnicka et al. (2017), in their research, showed that corporate innovation plays a mediating role between HRM practices and performance.

Li et al. (2006) examined the association between HRM, innovation, and performance of organizations in China and showed that HRM influenced innovation

and superior corporate performance. The training was positively linked to innovation. Also, HRM training is most directly correlated to products, processes, and innovation management (Ling and Nasurdin, 2010). Wong (2013) examined the importance of HRM in innovation, environmental management, and organizational performance. Through a literature review of relevant empirical research, including resource-based views and organizational performance. The results found casual relationships between HRM, innovation, and organizational performance. Therefore, the researchers stated that this research contributes to the organization's performance literature by highlighting HRMS's contribution to influencing the corporation's corporate performance through the mediating role of innovation and environmental management. Further, managers from the manufacturing industry will benefit from a better understanding of HRM practices' role in improving sustainable performance by permitting innovation and environmental performance.

In their research, Rasool et al. (2019) examined the possibilities of how HRM interprets organizational performance and uses innovation as the mediating role. The results showed that the HRM strategies directly and positively impact organizational performance. Furthermore, while all dimensions of HRM were positively related to innovation, it was positively associated with organizational performance. Innovation was, therefore, revealed to play a mediating role between HRM and organizational performance. However, in research, Volberda et al. (2013) studied management innovation: management as a rich ground for innovation and suggests that management innovation plays a mediating role in the relationship between HRM and OP. Consequently, based on the literature above, these hypotheses are predicted:

*H6:* Innovation management mediates the HRMS's impact on improving the investment board's employee performance in North Iraq.

*H7*: Innovation management mediates the HRMS's impact on improving the investment board's organizational performance in North Iraq.

### CHAPTER THREE: METHODOLOGY

This chapter explains the study methodology to describe how the study is conducted. However, all researchers show their opinions on the methods and values that guide their academic work. The main objective is to obtain data from different sources, including empirical data from survey samples, and determine data analysis to achieve the study's primary purpose, besides ensuring the results' accuracy. Therefore, this study used a quantitative method that reflects social designs. The quantitative method effectively collects the empirical data identified in the label to explore its various indicators, links, analysis, practical interpretation, and conclusions that contribute to this.

#### 3.1. The Study Method and Design

The researcher in this study used a quantitative research method (QRM). This method established suitable for the study aims to investigate HRM strategies and innovation management in improving employee and organizational performance based on empirical data obtained from survey samples working for an investment board in north Iraq. The quantitative method is commonly applied in studies when analyzing numerical data. Thus, this method comprises empirical data and statistical procedures describing, discovering, and demonstrating the relationships between variables. Furthermore, the quantitative study can understand a study method that uses statistical and quantified results based on reality and tries to measure objectives to produce generalizable information. In this context, the study's design aimed to develop the relationship and impact between the model constructs. This design is suitable as it allowed survey samples to contribute their essential information on the subject. The model further tested using SPSS, Amos 24, partial least squares (PLS) path modeling, a variance-based structural equation modeling (SEM) to analyze the data.

#### 3.1.1. Survey Measurement

#### **3.1.1.1.** Conceptualization of the HRMS

The strategies have been defined as the set of means and methods that the organization uses to reach goals, which involves a developed plan that defines the contexts and the flow of action, a maneuver intended to deal with and deceive competitors. Besides, it is a harmonious model of parts to reach a stable position in the environment. It is a perspective that gives the ability to perceive and realize things according to their correct relationships (Policastro, 2003; Salaman et al., 2005).

As indicated by Alsalem and Saleh (2000), human resources management represents an integrated system for managing human elements in organizations, and this is based on the fact that the human element represents the factors affecting the organizational performance and its adaptation to the environment, which is characterized by change, difficulty, and complication, which ultimately leads to organizations achieving their goals. This integrated HR system consists of the following elements: the external environment, human resources management functions, the internal environment, individuals, jobs, work results, and organizational results (Wayne, 2010).

In its broadest sense, human resources management strategies deal with the effective use of human resources at all levels of the organization to help achieve competitiveness and objectives. It is intensely interested in the functions performed by HR at the level of operational management, middle management, and top levels of senior management (Schuler, 1995; Tessema and Soeters, 2006). The human resources management approach is the practice that outlines the strategy of dealing with the human element and related matters about a job in the workplace, and these practices are in line with the organization's general approach, conditions, and future mission that it aspires to achieve (Singh, 2004).

Human resources management is concerned with the social, economic, psychological, administrative, and legal dimensions. Human resources run as a partial system of the overall design. It is an effort to reconcile people and work and connect based on integrated cultural and structural dimensions, translated into the planning and development programs. The purpose is to influence the quality and

quantity of work in the institution socially towards the users and thus the institution's continuation of economic activity (Seeck and Diehl, 2017; Sani, 2012).

Operational Definition of Human Resources Management Strategies. It is believed that human resources management strategies (HRMS) are the purpose in organizations that emphasize recruitment, training and development, performance evaluation strategy, and compensation and rewards. Besides providing direction for the people who work in the organization. Line managers can also perform HRM. Consequently, HRM is the administrative function that deals with people's safety, wellness, benefits, employee motivation, and communication. Based on the classifications have reviewed the indicators, below is the scale of the independent variable, which is human resources management strategies (HRSM), and its dimensions are as follows:

- First is, Recruitment Strategy (RS).
- The second is the Training and Development Strategy (TDS).
- The third is the Performance Evaluation Strategy (PES).
- Fourth, Compensation and Rewards Strategy (CRS).

#### 3.1.1.2. Operationalization of the HRMS

Recruitment is the first human resources management strategy that builds a diverse work environment. The lack of awareness or appropriate training may cause essential groups to be excluded from the work team. Recruitment is the process of gaining a suitable number and type of human resources (Heneman, 2008); as this process takes place in the light of the job analysis process, the planning of human resources and the recruitment process begins with the polarization. It includes a series of activities concerned with attracting qualified numbers of candidates for a specific job. The burdens in the recruitment process are higher for service organizations than for productive organizations. The quality of service provided depends on service providers' skills and capabilities from human resources (Mumtaz et al., 2012).

**Table 3.1.** The Indicators of the HRMS Construct.

Author(s)	Constructs	Indicators	Definition
(year)		D.G.I	
Alqadi,	Human	RS1	<b>Recruitment</b> is a strategy that includes
(2012).	Resources	RS2	attracting sufficient skills and experience
	Management	RS3	and applying systematic selection methods
	Strategies	RS4	for new employees. Determines the
	(HRMS)	RS5	conditions for filling each of the vacancies by the laws and circulars in force.
			Emphasizes qualitative and quantitative
			planning to meet its staff needs. However,
			transfer highly qualified employees to
			positions that possess significant creative
		TDS1	potential.
		TDS2	Training and development are an HRM
		TDS3	strategy covering necessary training
		TDS4	programs to strengthen employees'
		TDS5	behavioral patterns. The training is
			realistic, practical, and based on the
			business strategy.
			Also, management confirms the times of
		PES1	implementation of training programs.
		PES2	Performance evaluation is another HRM
		PES3	strategy that identifies its strengths and
		PES4	weaknesses and focuses on the
		PES5	professional results. It is addressing
		PES6	weaknesses to suit situations. The
			development of staff increases their skills
			in dealing with emergencies. It also
			provides an information base for
			formulating and developing policies
			related to its human resource needs.
		CRS1	Compensation and rewards in an HRM
		CRS2	strategy include the compensation offered
		CRS3	to employees and awarded based on their
		CRS4	competence. The bonus is used as part of a
			real incentive to reward high performance.
			However, determine the rewards and
			incentives that distinguished employees
			deserve.

Human resources management strategies are not limited to planning employees' requirements and providing these requirements but are more comprehensive. It also includes improving individuals' efficiency by designing training programs and supervising their implementation to prepare workers to practice their work according to sound principles. To achieve the organization's goals, training is considered one of the most important places due to its influential role in developing individuals' performance (Ahmed et al., 2008).

Training is a systematic process aimed at preparing qualified HR in various administrative, professional, and technical fields, providing the productive sectors with their needs from these elements, developing and raising their efficiency. Training is based on three main dimensions: the trainer, the trainee, and the training programs that include materials: process, methods, and other physical and cognitive aspects (Rebecca et al., 2013). Training is aimed to increase specific skills, and knowledge in certain areas and an attempt to increase the trainees' awareness of the institution's goals in which they work. In other words, training is the process of learning knowledge, new methods, and behaviors that lead to changes in employees' abilities to perform their work.

The training is to offer employees skills that are used directly in the fulfillment of jobs performance (Anthony et al., 1999: 337), and Bohlander et al. (2001: 222) also referred to training and development as an effort initiated by the organization to adopt learning and encourage among its members. Even though there are slight differences between training and development, the main goal is to raise its efficiency and effectiveness.

Training and development have been defined as the process of improving current and future performance by enhancing employees (Schular, 1995: 503). Performance evaluation refers to reviewing the performance of employees for their work and perceiving behaviors while at work to assess the extent of employees' success and level of efficiency in carrying out current staff work. Also, to measure the potential for growth and advancement of the individual in the future and bear more significant responsibilities or promotion to another job (Mittal and Khera, 2010; Richar and Johnson, 2004). In this regard, Khan (2010) stated that most employees do not just work for the existence of their job. Most individuals also want

a decent salary and other incentives that reward them for their hard work. Therefore, the wage groups should be developed, managed, and distributed efficiently. Proper compensation and benefits plans ensure that competent employees are equitably rewarded and the most cost-effective way.

Shahzad et al. (2008) showed a positive link between compensation/reward strategies and employee performance. Hence, top management believes that if compensation practices are not adopted and ignored on an ongoing basis; teacher performance will decline miserably. However, for each of the indicators controlled with the seven-point scale, one indicates "Completely Disagree," two as" Mostly Disagree," three as "Somewhat Disagree," four as" Neither Agree Nor Disagree," and five as "Somewhat Agree," six as "Mostly Agree," and seven as "Completely Agree."

#### 3.1.1.3. Conceptualization of Innovation Management (IM)

The concept of innovation implies newness and novelty, which is related to changing the existing forms, conditions, practices and creating new realities. However, these new realities are valuable to organizations, societies, economies, and the environment only if they contribute, facilitate, help, or enhance their development. In other words, the outcomes of innovations should add value to their recipients (Jacobs and Snijders, 2008). Innovation management is also described as the successful development, implementation, and use of new or structurally improved products, processes, services, or organizational forms (Hartley, 2006). Innovation usually is considered a new thing or method. Also, innovation is the embodiment, combination, or synthesis of knowledge in original, relevant, valued new products, processes, or services (Luecke and Katz, 2003: 20).

Therefore, creativity is often seen as the basis for innovation. For innovation to occur, there must be a creative idea and the ability to turn that idea into a business to produce a change. The outcome is a specific and perceptible change in the organization's services, products, or processes. It is believed that innovation is the successful implementation of creative ideas within an organization. In this view, individuals' and teams' creativity is a starting point for innovation; the first is vital, but not a reasonable condition for the second innovation is an organization's

lifeblood. Without it, is there no growing, then, inevitably, a slow death. Like many business functions, innovation is a management process that requires specific tools, rules, and discipline.

Operational Definition of Innovation Management. Innovation also includes definitions that focus on knowledge invention. Innovation is an object or idea that is supposed to be new. According to digital object identifier DOI, the rate of diffusion is affected by an innovation's relative advantage, complexity, compatibility, trialability, and observability. Rogers (1995) defines relative advantage as the degree to which an innovation is superior to its predecessor. Complexity is comparable to how the potential adopter understands innovation as relatively complex to use and understand. Compatibility also refers to the degree to which an innovation is compatible with adopters' existing values, beliefs, experiences, and needs.

According to Rogers (1995), innovation is a cognitive interpretation, with the user of the innovation being the judge of whether the entity stands as an innovation against the individual's experience. This makes the evolution of an innovation subjective – innovation in the eye of the beholder. Innovation is among creative employees will enable them to implement ideas effectively and develop management work to contribute to making the organization the most innovative, in addition to encouraging them to launch their ideas and discuss them with their colleagues and their heads, to transform them into distinct projects that contribute to improving performance and achieving efforts (Zizlavsky, 2020).

#### 3.1.1.4. Operationalization of Innovation Management (IM)

Innovation deal with changes, with new things, with risks, with different outputs, either because they are the first time, try to reach them, or be unique to one occasion (Smith et al., 2010). Innovation objectives correspond to common objectives because they are not expected to recur, and problematic situations sometimes inspire them because they sometimes contribute to the repair of unacceptable performance, but we are characterized by necessity described for new results. Therefore, what are the distinctive features of innovative objectives? It is change and risk with some significant additional benefits if successful. It seems natural to think about innovations when contemplating objectives. A common goal's

characteristic feature is repetition because it belongs to the continuous result areas where the output is achieved repeatedly. The commitment contained in the routine goal statement is purely an explanation of the standards or performance levels that are average to work. The problem-oriented targets deal with those results where the current performance levels are lower than the accepted standard, and the committee sought in this objective statement is to resolve (Stewart and Fenn, 2006; Smith et al., 2010; Thomas, 2011). Specific, innovative objectives contain three items that should be included in the innovative goal statement (ideas, results, method, and schedule); each of them requires consideration and negotiation (Luecke and Kate, 2003: 25). However, for each of the indicators controlled with the seven-points scale, one indicates as "Completely Disagree," two as" Mostly Disagree," three as "Somewhat Disagree," four as" Neither Agree Nor Disagree," and five as "Somewhat Agree," six as "Mostly Agree," and seven as "Completely Agree."

Table 3.2. The Indicators of Innovation Management Construct.

Author(s)	Constructs	Indicato	Definition
(year)		rs	
Zhang,	Innovation	IM1	Innovation management includes the
Khan, Lee &	Management	IM2	policy that applies to all managers and
Salik (2019).	(IM)	IM3	employees who adopt innovative ideas to
		IM4	develop work spontaneously and
Goyal & Pitt		IM5	effortlessly. Also makes changes to
(2007).		IM6	employees' tasks and functions. Rules
		IM7	and procedures are renewed and
		<i>IM8</i>	implementing new management systems.
		<i>IM9</i>	Management considers having internal
		<i>IM10</i>	and outsourced teams that have the same
		<i>IM11</i>	approach towards innovation. Pursues to
		<i>IM12</i>	establish research and development units
			to improve employee and organizational
			performance. The primary objective
			would be innovation in vital business
			functions. However, suppliers,
			partnerships, and subcontractors are
			chosen for their ability to demonstrate an
			innovative approach. Implementing new
			ideas and methods and pursuing
			solutions to problems.

#### 3.1.1.5. Conceptualization of Employee Performance (EP)

The content of employee performance refers to obtaining specific facts and data about the employee's performance of the tasks to help analyze, understand, and assess the level of performance carried out and give employees a particular value to what is required to be implemented. Besides understanding the employee's behavior by carrying out their duties, i.e., estimating the technical and scientific competence to implement—the responsibilities and tasks contained in their work (Al-Saidi et al., 2013).

The performance represents a special place within any organization as it is the final of all activities' outcomes at the employee and the organization level. The organization is more stable and longer-lasting when the employee performance is outstanding. Hence, it can be mentioned that, in general, the organization's management interest and its leadership in the level of performance usually outweigh the interest of the employees (Altuntaş and Dönmez, 2010).

In this regard, Singh, and Agarwal (2011) indicated that the employee performance results of behaviors, which contribute to the organizational goals achievement, considering the performance of the specified tasks using the available resources. Besides taking care of some other variables, such as success in maintaining good internal relationships, absenteeism, leaving the organization, misuse of resources, and other risky behaviors in the workplace. Also, employee performance is defined as the employees' implementation of their work and responsibilities assigned to them by the institution to which they relate, meaning the behavior's specific results. In return, the downbeat performance is the undesirable consequence of the behavior (Anjum et al., 2018). Thus, standards in an organization for evaluating employee performance refining performance as shows actual performance and aligns it with standards. If differences are found, these standards will help return the outputs to the required levels.

Operational Definition of Employee Performance. Employee performance is the result of finalized actions based on employee experience and skills. In regulatory settings, employee performance accrues due to all employees' skills, efforts, and abilities that have contributed to improving organizational productivity and leading to their goals. Improved performance refers to goal-achieving efforts while requiring

more effort to improve employee performance (Ellinger et al., 2003; Pradhan and Jena, 2017).

#### **3.1.1.6.** Operationalization of Employee Performance (EP)

Employee performance is an essential factor in the success of any organization. Accordingly, in the current business era of speedy change, and unpredictable technological and environmental factors, organizations should develop their employees' performance to meet the market's demands and challenges. Business performance development can be both at the level of the organization and individuals. Organizations should emphasize achieving better employee performance, by offering their human resources a set of tools and skills to face new realities and challenges (Batarlienè et al., 2017).

Globalization, new market demands, innovation, and a smart economy are considered a challenge, as well as drivers for companies to maintain and improve employee performance. In this regard, Cooper and Ezzamel (2013) mentioned some considering challenges may organizations face such as the demands of the new markets, innovation process, and globalization. Thus, they are required to retain and enhance employee performance. However, dealing with rapid changes in the business environment, namely modern technology applications, requirements of stakeholders, and requirements of the market depends on dropping the gap within employee positions as a key factor in achieving the organization's smart goals (Shah et al., 2017).

As we refer to Pradhan and Jena (2017), employee, performance indicators are comprised of tasks assigned to employees. Therefore, employees should take the inclination and capabilities to adapt to the changes and new circumstances. Perform duties should be based on standards. In this regard, employee skills must be developed from training programs that support employees in formulating modern business methods (Saadi et al., 2013). The HR department should adopt a policy to encourage employees to present new ideas and practices to improve employee job performance. however, the implemented systems and rules should contribute to the completion of work efficiently and effectively (Pradhan and Jena, 2017) as employee performance includes the results of members' behavior and the behaviors themselves.

Employees' performance is about what the employees do, not about what the employees produce or their work results. Employee performance represents the employee's general belief about his behavior and contributions to the organization's success (Aguinis, 2009). However, for each of the indicators of employee performance measured with the seven-points scale.

**Table 3.3.** The Indicators of Employee Performance Construct.

Author(s)	Constructs	Indicato	Definition
(year)		rs	
Pradhan &	Employee	EP1	Employee performance includes
Jena (2017).	Performance (EP)	EP2	completing tasks assigned to employees.  The employees should take the inclination
		EP3	and capabilities to adapt to the changes and new circumstances. Perform duties
Saadi, Ali		EP4	according to standards. Skills developed
& Saad (2013).		EP5	from training programs help employees formulate modern methods of doing
		EP6	business. The necessary capabilities and skills are available to employees to solve
		EP7	daily problems during work—sufficient
		EP8	knowledge of the nature of the work assigned to them. Provide coordination
		EP9	between the different administrative levels to complete the work as required. The HR
		EP10	department adopts a policy to encourage
		EP11	employees to present new ideas and methods to improve employee job
		EP12	performance. The adopted systems and rules contribute to the completion of work
			efficiently and effectively. Provides the
			latest computer and technical approaches
			to complete the work with the required speed and high efficiency, however,
			having an effective incentive system
			linked to employee performance.

#### 3.1.1.7. Conceptualization of Organizational Performance (OP)

Performance can be well described as how an employee, group of individuals, or object performs work or activity. In organizational research, performance can be visualized at different levels of analysis. Here, we distinguish between the organizational, team, and individual levels (Knies et al., 2016). Organizational performance is defined as the result of a compound set of interactions between individuals, methods, materials, and equipment that they use and between these individuals, the culture, and the environment in which they work (Barakat, 2005).

Organizational performance is a fundamental concept for organizations in general, the core management task of achieving the goals and objectives for which the organization was founded. To achieve this, organizations must use management, planning, and performance evaluation. However, the key is to address the gap between them by managing performance based on measurement and planning (Younis et al., 2019; Zhang et al., 2020).

Organizational performance is widespread in academic literature, and its definition is ambiguous due to its multiplicity of meanings. Thus, there is not mostly agreed definition of this concept. It can be defined as converting inputs into outputs to achieve specific results. Performance can occur at different levels and in different forms (Yammarino et al., 2005). Organizational performance is also the relationship between the lowest and reasonable cost or economy, the higher cost and the estimated output, or the efficiency between the output and its effectiveness (Chen & Barnes, 2006).

From this perspective, the organizations' interest, especially those keen to achieve excellence and continuity in managing performance in its various aspects and seeking to improve its levels, is urgent, especially in light of the new administrative developments that focus on performance, mainly showing the impact of applying each method and its role in the development (Zhu & Sarkis, 2004).

However, organizational performance is the effort and activity of individuals to implement and improve a particular work in different ways; it implements the work plans without infringing on the necessary standards. The related literature review will focus on the key areas present in this empirical research, including issues

linked to effective leadership, GSCM implementation, and organizational performance (Lee et al., 2018).

Operational Definition of Organizational Performance. Organizational performance enhances the companies' efficiency and the welfare of their employees over planned involvements. One of the three main points in organizational development that leads to organizational performance is developing many organizations' efforts to increase organizational learning to influence organizational performance (Jon and Randy, 2009). Organizational performance can often be defined as the result that shows or reflects the organization's efficiency or inefficiency to environmental performance, corporate image, competencies, social performance, and economic performance (Khandekar and Sharma, 2006).

Organizational performance is also the company's ability to meet its customers' demands and serve as the metrics for competition in the market. Performance refers to the strategic dimensions through which a company chooses to compete (Narasimhan & Das, 2001). Thus, organization abilities must be absorbed on emerging competitive priorities. The competitive advantage attainment depends on the effective transformation of competitive significances into strategic abilities (Ho et al., 2002).

#### 3.1.1.8. Operationalization of Organizational Performance (OP)

Also, we refer to Koohang et al. (2017) to measure organizational performance using eight indicators. Organizational performance is the measure of an organization's progress and development. It shows how well an organization is accomplishing its goals and objectives. Organizational performance analyzes a company's performance compared to goals and objectives (Otley, 1999).

Since measures of organizational performance depend on the questions and why they need to be measured, some professionals need to measure and report it to justify the correct use of investor funds and guide management decision-making by signaling to problem areas, comparing the performance of different jobs, projects and exercise control, so the definition of organizational performance changes according to use. It is believed that the organizational performance is clear from the fact that it reflects the highest level of performance. This is the organization's main objective by

using various resources with the highest efficiency. This exceeds the ability of its competitors to perform the same under similar sufficient conditions (Rasool et al., 2019).

In this context, Lee et al. (2018) argued that organizational performance is the effort and activity of individuals to implement and improve a particular work in different ways; it implements the work plans without infringing on the necessary standards. However, for each of the organizational performance construct indicators measured by using seven-points scale.

**Table 3.4.** The Indicators of Organizational Performance Construct.

Author(s) (year)	Constructs	Indicators	Definition
Koohang,	Organizational	OP1	Organizational performance
Paliszkiewicz	Performance	OP2	comprises the desired result as an
, and	OP	OP3	essential part of the organization,
Goluchowski		OP4	accomplishing a job/task with a
(2017).		OP5	minimum expenditure of time and
		OP6	effort—the service quality. The
		OP7	organizational ability to resourcefully
		OP8	generate, create, enhance, and produce
			goods and services is vital. HRM
			encourages joint teamwork and
			participation in providing opinions to
			improve organizational performance.
			The innovation process of the
			investment, transforming an
			idea/invention into a product or
			service that creates value, is vital to
			survival. However, organizational
			performance is profitability, a profit
			or gain that gives an organization the
			ability to gain a competitive
			advantage.

### 3.2. The Study Population and Sampling

The study population is managers and employees working for the branches of investment boards in north Iraq, namely the general directorate, Erbil investment board, Sulamaniya, Duhok, Halabja, and Kirkuk investment boards. The survey possible respondents were randomly selected from the mentioned branches on

investment boards in north Iraq. Regarding the sampling method, the random sampling technique is used, according to the following equations:

$$\overline{y} = \frac{1}{N}(y_1 + y_2 + \dots + y_N) = \frac{1}{N} \sum_{i=1}^{n} y_i$$
 (1)

The mean of the samples  $\bar{y}$  is the average of the y-value in the survey sample:

$$\overline{y} = \frac{1}{n}(y_1 + y_2 + \dots + y_n) = \frac{1}{n}\sum_{i=1}^n y_i$$
 (2)

The mean of the samples  $\bar{y}$  is the estimator of the study population mean  $\mu$ . The population mean  $\mu$  is the average of the y-value in the whole population. The survey questionnaires were administered personally and electronically through internet survey to all investment boards managers and their employees. However, the investment boards are selected as the study population since investment boards are expected to respond well to HRM strategies, innovation management, employee and organizational performance, and sophisticated informants and practice innovation solutions to projects more presently. However, the investment boards are the correctly targeted population size; this study pursues to observe their managers' and employees' perceptions of how to practice innovation management, effectively manage human resources, and improve performance.

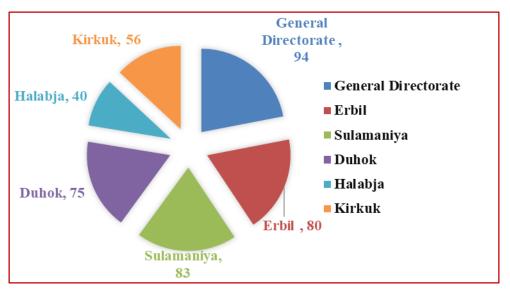


Figure 3.1. Survey Samples

The sampling process was convenience-based; reviewing the managers' and employees' perceptions were taken from investment boards in north Iraq by organizing various approaches to narrow down the study population to sort an appropriate sample. Therefore, the empirical data collection was launched through personal visits and sending out an invitation letter to branches of investment boards via email. Thus, most survey questionnaires were administered electronically through a professional internet survey to all management levels and employees. Though, at the final step of the data collection, 455 completed surveys were submitted. 27 forms of the 455 surveys were removed as they had missing data, thus, yielding a final of 428 samples, which is considered a good sample, see Table 3.5 below.

**Table 3.5.** Population and Sampling

The Study the Population	ı & Size	Sampling	g
		Distributed Forms	Valid Forms
<b>General Directorate</b>	117	100	94
Erbil	105	84	80
Sulamaniya	108	89	83
Duhok	89	80	75
Halabja	51	43	40
Kirkuk	63	59	56
Overall Population Size	533	Overall Sample Size	428

Source: by the researcher based on survey data

#### 3.3. Ethical Considerations

In this study, ethical considerations are significantly considered, as it is the critical part of the studies, mainly dissertations studies. In this regard, survey sample, or responders were not subjected to obliteration in any way (Bryman and Bell, 2015), whereas they enthusiastically take part in the survey, they also contributed based on informed consent. As suggested by Saunders et al. (2012), all steps and writing considerations maintain the highest fairness in the study period.

#### 3.4. Data Analysis Procedures

We used statistical programs, such as SPSS- Amos 24, and partial least squares (PLS), based on structural equation modeling (SEM), to analyze the empirical study data and hypotheses testing, in particular, to run descriptive statistics to quantitatively define the study variables' significant features over statistical means, standard deviations, and the agreement weight. The relationship analysis is also used to determine if there are relationships between model constructs. Multiple linear regression analyses are applied to check the study impact hypothesis. However, PLS-SEM's vital features assess a model with many constructs and indicators, with a small and medium-size survey sample size. The PLS path is a typical examination method for defining path models, mostly with latent variables and their relations (Hair et al., 2012; Henseler et al., 2013).

According to Sarstedt et al. (2017), PLS has three significant assessments before hypothesis testing. These are convergent reliability and validity and analytical check of the structural model. Therefore, it is significant to test the validity of research constructs, accordingly, to apply structural equation modeling, using confirmatory factor analysis, and testing hypotheses we have established the validity of the study model. In this context, the values of average variance extracted (AVE) must always be greater than 0.5.

The values loaded on the root of the AVE must be correlated with all research constructs while at the same time checking the validity of discrimination based on the specified criteria (Beins and McCarthy, 2018). Furthermore, the values loaded on composite reliability (CR) should be greater than 0.80. Cronbach's  $\alpha$  is used to calculate the reliability of the constructs, this test also estimates the reliability of the questionnaire's responses assessed by subjects referring to the survey instrument constancy. Cronbach's  $\alpha$  ranges from 0.7 and higher values indicate good reliability of constructs (Hair et al., 2014).

#### 3.5. Establishing Model's Reliability and Validity

The reliability and validity of the model are among the most prominent concepts used to assess the quality of the study, indicating the value of statistical investigation procedures and techniques used in the study, reliability relates to the consistency of the study instrument (scale), and validity relates to the accuracy of the scale. Reliability and validity are closely linked, but they point to different purposes consistent with the primary objective of assessing the quality of the study, the measurement can be reliable without being truthful, and truthful measurement is always generally reliable. Therefore, it is significant to consider reliability and validity when planning a study, forming study design, and writing results, especially in quantitative research.

Table 3.6. Constructs' Reliability and Validity.

Contracts	Average Variance	Composite	Cronbach's
(Variables)	Extracted (AVE)	Reliability (CR)	α
RS	0.690	0.907	0.815
TDS	0.585	0.867	0.784
PES	0.609	0.801	0.732
CRS	0.589	0.813	0.751
IM	0.593	0.843	0.766
EP	0.758	0.941	0.860
OP	0.545	0.837	0.748

**Note.** RS = Recruitment Strategy, TDS= Training and Development Strategy, PES= Performance Evaluation Strategy, CRS= Compensation, and Rewards Strategy, IM= Innovation Management, EP= Employee Performance, OP= Organizational Performance.

As revealed in Table 3.6 the average variance extracted (AVE) loaded values for the human resource management strategies constructs such as recruitment strategy, training and development strategy, performance evaluation strategy, and compensation and rewards strategy construct are (0.690, 0.585, 0.609, and 0.589), in addition, the loaded values on other model construct namely innovation management, employee performance, and organizational performance reached (0.593, 0.758, and 0.545), respectively, that all values greater than 0.05.

The composite reliability (CR) loaded values connected to model constructs, are also all higher than 0.80. As they reached (0.907, 0.867, 0.801, 0.813, 0.843, 0.941, and 0.837), respectively. In the same regard, the Cronbach's  $\alpha$  is tested to

establish model reliability through internal consistency when a reliable score is significant (ie, consistent), meaning that results yield similar results when repeating the questionnaire, under the same conditions, where the values of Cronbach's  $\alpha$  are (0.815, 0.784, 0.732, 0.751, 0.766, 0.860, and 0.748), respectively, which all higher than 0.70. The results verified the research model's reliability and validity.

#### 3.5.1. Internal Validity

The internal validity of the survey instrument was also checked to find out whether the survey questionnaire perform and assess what was set to measure. It also means the clarity of the questionnaire, and its indicators, and provides perceptions for the study samples who be covered by the questionnaire, and statistical analysis. Therefore, the positive and significant correlation between indicators of constructs expresses their validity. As shown in *Table 3.7* there was a large group of significant and positive correlations between human resource management strategies indicators in terms of recruitment strategy, training and development strategy, performance evaluation strategy, compensation, and rewards strategy.

**Table 3.7.** Correlation Matrix of Human Resource Management Strategies

		RSl	RS2	RS3	RS4	RS5	TDS1	TDS2	TDS3	TDS4	TDS5	PES1	PES2	PES3	PES4	PES5	PES6	CRS1	CRS2	CRS3	CRS4
C	RSl	1																			
9	RS2	.725	1																		
elation	RS3	.670	.702	1																	
Đ.	RS4	.581	.562	.617	1																
-	RS5	.438	.494	.456	.637	1															
	TDS1	.450	.467	.516	.670	.786	1														
	TDS2	.581	.442	.552	.769	.531	.752	1													
	TDS3	.521	.455	.616	.663	.667	.535	.678	1												
	TDS4	.649	.554	.509	.551	.587	.608	.639	.669	1											
	TDS5	.552	.655	.616	.627	.676	.661	.666	.574	.627	1										
	PES1	.496	.582	.513	.644	.560	.509	.421	.264	.522	.636	1									
	PES2	.581	.658	.527	.575	.599	.649	.455	.312	.558	.555	.631	1								
	PES3	.616	.739	.614	.625	.662	.589	.433	.891	.619	.507	.566	.632	1							
	PES4	.513	.683	.703	.649	.572	.604	.792	.739	.404	.534	.509	.509	.682	1						
	PES5	.567	.711	.679	.515	.565	.531	.506	.512	.447	.550	.370	.485	.445	.617	1					
	PES6	.410	.515	.538	.541	.519	.649	.785	.636	.502	.620	.400	.565	.586	.598	.809	l				
	CRS1	.575	.603	.642	.716	.574	.765	.629	.570	.518	.565	.357	.486	.627	.531	.623	.705	1			
	CRS2	.577	.660	.648	.758	.682	.640	.685	.701	.413	.418	.352	.701	.543	.469	.605	.520	.616	1		
	CRS3	.613	.579	.770	.770	.776	.730	.610	.676	.596	.412	.564	.626	.420	.515	.567	.629	.555	.673	1	
	CRS4	.556	.556	.619	.663	.582	.582	.610	.499	.405	.515	.527	.419	.581	.610	.569	.693	.524	.634	.703	1

When we look at Table 3.8, we can realize that there were a great number of significant and positive relationships between the indicators of innovation management. It means that the survey scale to measure innovation management is accurate and established as the ability and constancy of a tool such as a questionnaire to give the same results if repeat the measurement on the same study sample members many times in the same circumstances, and stability in most cases is a correlation factor.

**Table 3.8.** Correlation Matrix of Innovation Management

		IM1	IM2	IM3	IM4	IM5	IM6	IM7	IM8	IM9	IM10	IM11	IM12
	IM1	1											
	IM2	0.611	1										
	IM3	0.418	0.653	1									
	IM4	0.570	0.599	0.521	1								
_	IM5	0.613	0.523	0.492	0.603	1							
Correlation	IM6	0.555	0.678	0.415	0.451	0.657	1						
elati	IM7	0.515	0.460	0.591	0.592	0.559	0.901	1					
on	IM8	0.691	0.477	0.546	0.501	0.393	0.624	0.749	1				
	IM9	0.341	0.544	0.556	0.394	0.448	0.850	0.690	0.517	1			
	IM10	0.431	0.396	0.602	0.580	0.441	0.673	0.760	0.545	0.719	1		
	IM11	0.472	0.402	0.570	0.488	0.546	0.777	0.546	0.475	0.560	0.751	1	
	IM12	0.568	0.763	0.613	0.753	0.634	0.698	0.616	0.647	0.608	0.666	0.893	1

In the same context, we have checked the internal validity of the employee performance construct. Table 3.9 showed many positive and significant relationships between the indicators of employee performance construct. Thus, the questionnaire instrument, we used for the measurement of employee performance construct is valid and serves a general purpose of the measure.

**Table 3.9.** Correlation Matrix of Employee Performance

		EP1	EP2	EP3	EP4	EP5	EP6	EP7	EP8	EP9	EP10	EP11	EP12
	EP1	1											
Co	EP2	0.852	1										
orrela	EP3	0.668	0.763	1									
lation	EP4	0.666	0.632	0.739	1								
	EP5	0.508	0.603	0.514	0.789	1							

EP6	0.631	0.740	0.668	0.622	0.588	1						
EP7	0.699	0.739	0.587	0.615	0.607	0.747	1					
EP8	0.670	0.536	0.686	0.551	0.449	0.665	0.746	1				
EP9	0.391	0.444	0.547	0.684	0.662	0.749	0.580	0.843	1			
<b>EP10</b>	0.607	0.652	0.577	0.603	0.738	0.818	0.641	0.772	0.747	1		
<b>EP11</b>	0.662	0.424	0.379	0.725	0.688	0.552	0.831	0.765	0.680	0.754	1	
EP12	0.618	0.627	0.705	0.647	0.743	0.557	0.679	0.666	0.590	0.631	0.833	

Furthermore, as revealed in Table 3.10 there were also significant and positive correlations between indicators of organizational performance. This result indicates that the survey is valid and serves the overall purpose of measuring the desired outcome of the organization, accomplishing the task with minimal expenditure of time and effort - the quality of service. The organizational capacity to generate, create, enhance, and produce goods and services.

**Table 3.10.** Correlation Matrix of Organizational Performance

	OP1	OP2	OP3	OP4	OP5	OP6	OP7	OP8
OP1	1							
E OP2	0.790	1						
OP1 Orrelation OP4	0.623	0.841	1					
B OP4	0.545	0.729	0.798	1				
OP5	0.699	0.647	0.625	0.739	1			
OP6	0.526	0.658	0.598	0.608	0.585	1		
OP7	0.532	0.718	0.444	0.740	0.483	0.752	1	
OP8	0.641	0.685	0.687	0.556	0.616	0.640	0.858	1

#### 3.5.2. Factor Analysis (Measurement Model)

For the measurement model, we have tested factor analysis as a statistical method used to define the latent variables and for exploring coefficients for the positive correlations that it has statistical significance between the different variables, the intent is that the factor analysis pursues to facilitate the correlations between the variables. Several factors are involved in the analysis until it reaches the factors that have common characteristics and that explain the relationship between these variables. Factor analysis is also looking for the common variances in response to

unobserved latent variables and the observed variables are demonstrated as linear combinations of potential factors (Steven, 2008).

The aim behind factor analysis is that the empirical data obtained about the interrelationships between the observed variables can subsequently be used to reduce the set of variables in the data set, therefore, factor analysis is commonly used in management studies (Abdullah et al., 2020). This may help in dealing with data sets where there are large numbers of observed variables that are believed to reflect fewer latent variables. Based on that factor analysis is one of the most widely used interdependency techniques and is used when the set of related variables shows a systematic dependence among them, and the aim is to discover underlying factors that establish correlations.

#### 3.5.2.1. The KMO and Bartlett's Test for HRMS

As a significant step in factor analysis, we used the Kaiser-Meyer-Olkin (KMO) to test the weight of factor analysis. When the sample adequacy is to be determined, the measure Olkin-Meyer-Kaiser (KMO) scale is used by comparing the amounts of coefficients observed. In amounts of partial association, it is calculated according to:

$$KMO = \frac{\sum_{i} \sum_{\neq j} r^{2}_{ij}}{\sum_{i} \sum_{j} r^{2}_{ij} + \sum_{i} \sum_{\neq j} a^{2}_{ij}}$$
(3)

Where:

 $\mathbf{r}_{ij}$  represents the simple correlation coefficient between the variables i, j.

 $\mathbf{a}_{ij}$ = represents the partial correlation coefficient between the variables i, j.

Based on Kaiser-Meyer-Olkin (KMO) test, the high loading value is between (1.0 and 0.5), these values identified that the factor analysis is accurate. However, the values of the KMO test lower than (0.5) shows that the test may not be appropriate. The KMO result is (0.861), indicating that the sampling adequacy is very good and significant at (p0.000<0.05). Bartlett's test of sphericity (Approx. Chi-Square) is (2261.214) df (190). Consequently, factor analysis applies to human resource management strategies.

Table 3.11. KMO and Bartlett's Test of HRMS

KMO and Bart	HRMS	
Kaiser-Meyer-Olkin Measure	0.861	
<b>Bartlett's Test of Sphericity</b>	Approx. Chi-Square	2261.214
	df	190
	0.000	
a. Based on correlations		

#### 3.5.2.2. Rotated Component Matrix for HRMS

The rotation of factors or components is vital once the extracted factors are two or more. The main reason for the rotation is to obtain simple construction. There are many practical methods whose main concern is to provide a solution to the simple construction process, and the most well-known of them is the Kaiser varimax method.

Table 3.12. Rotated Component of HRMS

Indicators		Facto	ors	
	1	2	3	4
RS1	0.789		-	
RS5	0.745			
RS4	0.739			
RS2	0.736			
RS3	0.705			
TDS1		0.917		
TDS3		0.774		
TDS2		0.766		
TDS5		0.704		
TDS4		0.701		
PES2			0.781	
PES1			0.778	
PES6			0.743	
PES3			0.747	
PES4			0.715	
PES5			0.706	
CRS1				0.859
CRS2				0.785
CRS4				0.770
CRS3				0.701

The rotation of components was also measured to give evidence of how the factors principally extracted contrast from each other and to provide an accurate magnification of which component loads on which factor. The entire variable has the factor taking values the lower value is (0.701), for both *TDS4* and *CRS3* regarding the training that needs approval by the HRM department is realistic, practical, and based on the business strategy, and the bonus is used by the boards as part of a real incentive to reward high performance.

Besides, the higher values are (0.917, and 0.859) loaded on *TDS1* and *CRS1*, regarding the HRM department, develops the necessary training programs to strengthen employees' behavioral patterns to achieve appropriate performance, and the compensation offered by the investment board is commensurate with the expectations of employees, as shown in *Table 3.12* below.

#### 3.5.2.3. Percentage of Eigenvalue and Variance Explanations for HRMS

Eigenvalue percentage and variance explanations were used for HRMS constructs namely recruitment strategy, training and development strategy, performance evaluation strategy, compensation, and rewards strategy. The variances size in all the variables that are calculated on a single factor is measured by the potential root, the potential root value is the measure of the size of the variance used for comparison is not a proportion to the interpretation of the variance, but according to the Kaiser, the criterion has accepted the factor in which the eigenvalue is greater than one (Benson and Levine, 1992).

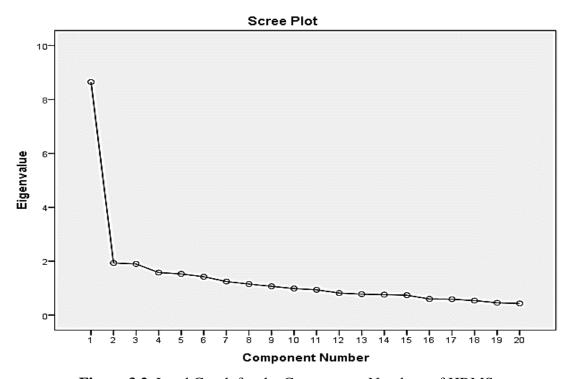
**Table 3.13.** Total Variance Explained of HRMS

<b>Factors</b>	<b>Eigenvalues</b>	Variance	Cumulative%
		Explanation%	
1	8.650	30.778	30.778
2	1.934	6.882	37.660
3	1.897	6.749	44.409
4	1.577	5.612	50.021
19	-	-	
20	0.859	100.000	

**Extraction Method: Principal Component Analysis.** 

a. When analyzing a covariance matrix, the initial eigenvalues are the same across the raw and rescaled solution.

As shown in Fig. 3.2 and Table 3.13 the first factor was clarified as a large quantity of variance was (30.78%) of the total variance, where it is eigenvalue is greater than one. The second-factor variance explanation value is (6.82%). The third factor reached (6.749%) of the total variance. Finally, the fourth factor was accepted that reached (5.612%), and since the eigenvalues are (1.577), which was higher than one. Overall, (50.021%) explained the variance by recruitment strategy, training and development strategy, performance evaluation strategy, compensation, and rewards strategy factors.



**Figure 3.2.** Load Graph for the Components Numbers of HRMS.

#### 3.5.2.4. The KMO and Bartlett's Test for Innovation Management

As the results are shown in *Table 3.14*, the Kaiser-Meyer-Olkin (KMO) test, was used for the innovation management construct to find out if there is a correlation between innovation management indicators and the factor analysis suitable for is construct. The KMO result reached (0.701), showing that the sampling adequacy is very good and the correlation between innovation management indicators is significant at (p0.000<0.05). Bartlett's test of sphericity (Approx. Chi-Square) is (593.670) df (66). Thus, factor analysis is appropriate and applied to innovation management.

**Table 3.14.** KMO and Bartlett's Test of Innovation Management

KMO and Bartlett's Test		Innovation
		Management
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.701
Bartlett's Test of Sphericity Approx. Chi-Square		593.670
	df	66
	Sig.	0.000
a. Based on correlations		

#### 3.5.2.5. **Rotated Component Matrix for Innovation Management**

The rotation of components was used for innovation management since this construct loaded three factors. The whole construct has the factor taking values the lower value is (0.709), on *IM3* about the investment board regularly makes changes to it is employees' tasks and functions. Also, the higher values are (0.860, 0.854, and 0.826), respectively loaded on IM7, IM2, and IM9, regarding the investment board's management, actively pursues to establish research and development units to improve employee and organizational performance. The investment board adopted new innovative ideas to develop work instinctively and effortlessly. Furthermore, the innovation process in the investment board is growing from year to year, as revealed in Table 3.15 below.

**Table 3.15.** Rotated Component of Innovation Management

<b>Indicators</b>		<b>Factors</b>	
•	1	2	3
IM9	0.826		-
IM1	0.789		
IM5	0.751		
IM3	0.709		
IM2		0.854	
<i>IM11</i>		0.819	
<i>IM10</i>		0.798	
IM6		0.781	
<i>IM12</i>		0.765	
<i>IM7</i>			0.860
IM8			0.797
IM4			0.784

# 3.5.2.6. Percentage of Eigenvalue and Variance Explanations for Innovation Management

As displayed in Fig. 3.3 and Table 3.16, the first factor was explained as a large size of variance as reached (23.615%) of the total variance of this factor, and the eigenvalue is 3.119, which is greater than one. The second factor's variance explanation value is (10.62%). Lastly, the third factor was accepted that reached 9.448%, and since the eigenvalues are (1.248), which was higher than one. Furthermore, a total of (43.726%) explained the variance by innovation management

Table 3.16. Total Variance Explained of Innovation Management

Factors	Eigenvalues	Variance	<b>Cumulative%</b>
		<b>Explanation%</b>	
1	3.119	23.615	23.615
2	1.408	10.662	34.278
3	1.248	9.448	43.726
11	-	-	
12	0.550	100.000	

**Extraction Method: Principal Component Analysis.** 

a. When analyzing a covariance matrix, the initial eigenvalues are the same across the raw and rescaled solution.

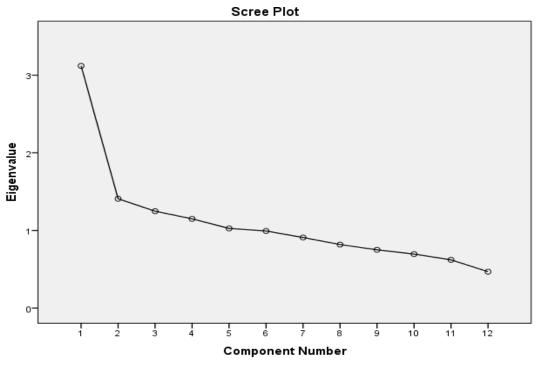


Figure 3.3. Load Graph for the Components Numbers of Innovation Management.

#### 3.5.2.7. The KMO and Bartlett's Test for Employee Performance

Table 3.17 presented the Kaiser-Meyer-Olkin (KMO), which was used for employee performance construct to reveal the appropriate factor analysis for the first outcome variable. As previously mentioned, high values loaded are between (1.0 and 0.5); thus, values between these figures establish that the factor analysis is correct to run. The loaded values of KMO <0.5 show that the use of factor analysis, in this case, is not acceptable. The KMO test result is (0.796), which means that the loaded value of sampling adequacy is good and significant at (p0.000<0.05). However, Bartlett's test of sphericity (Approx. Chi-Square) is (805.658) df (66). Based on these results there is a significant correlation between employee performance construct indicators thus, factor analysis is suitable for employee performance.

Table 3.17. KMO and Bartlett's Test of Employee Performance

KMO and Bartlett's Test		Employee
		Performance
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.796
Bartlett's Test of Sphericity Approx. Chi-Square		805.658
	df	66
	Sig.	0.000
a. Based on correlations		

#### 3.5.2.8. Rotated Component Matrix for Employee Performance

As summarized in *Table 3.18*, the rotation of components was used for the employee performance construct, as this construct loaded three factors. Results also showed that the construct has the factor-taking values the lower value is (0.701), on *EP1* about employees completing the tasks assigned to them without delay. In addition, the higher values (0.872, 0.832, and 0.829), respectively loaded on *EP6*, *EP12*, and *EP4*, regarding the required capabilities and skills, are available to employees to solve daily problems during work. There was an effective incentive system linked to employee performance. Moreover, the employees perform their duties according to the approved standards, as revealed in *Table 3.18* below.

**Table 3.18.** Rotated Component of Employee Performance

Indicators		<b>Factors</b>	
	1	2	3
EP12	0.832		
EP4	0.829		
EP8	0.787		
<i>EP10</i>	0.745		
EP6		0.872	
EP5		0.787	
EP7		0.766	
EP3		0.715	
EP1		0.701	
EP9			0.791
<i>EP11</i>			0.779
EP2			0.735

3.5.2.9. Percentage of Eigenvalue and Variance Explanations for Employee Performance

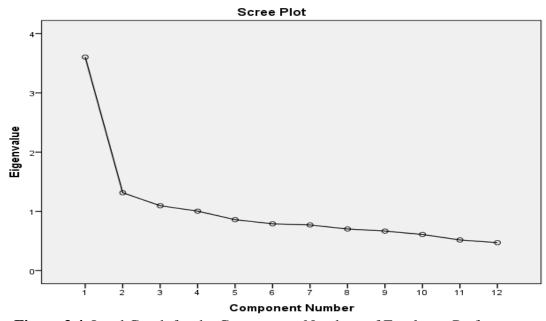
As demonstrated in *Fig. 3.4, and Table 3.19*, the percentage of eigenvalues is taken as one and greater (3.604, 1.314, and 1.095), due to common factors, three factors are extracted. The employee performance total variance explanations reached (48.487%). The calculation of the first factor embodies the highest in the data set. According to this result, we know that the first factor is most significant in explaining the variable describing (29.061%) of the total variance, comprises variables. The second factor describes lower and reached (10.595%) of the total variance and contains the right components. Finally, the third factor was also accepted that reached 8.831%, since the eigenvalue was higher than one.

**Table 3.19.** Total Variance Explained of Employee Performance

Factors	Eigenvalues	Variance	<b>Cumulative%</b>
		<b>Explanation%</b>	
1	3.604	29.061	29.061
2	1.314	10.595	39.656
3	1.095	8.831	48.487
11	-	-	
12	.472	100.000	

**Extraction Method: Principal Component Analysis.** 

The Load graph shared the same results, as the improved initial loading of data for a baseline. Integration samples included a complete graph for loaded three factors.



**Figure 3.4.** Load Graph for the Components Numbers of Employee Performance.

#### 3.5.2.10. The KMO and Bartlett's Test for Organizational Performance

In the same context, and as a last construct of the model, the KMO and Bartlett's test also used the organizational performance construct to establish factor analysis suitable for the second study outcome variable. When we look at the results in *Tabel 3.20*, we can realize that the KMO test outcome is (0.713), which means that the organizational performance construct indicators loaded value is accepted and the correlation between the indicators is significant at (p0.000<0.05). The values loaded on Bartlett's test of sphericity (Approx. Chi-Square) reached (357.815) df is (28),

a. When analyzing a covariance matrix, the initial eigenvalues are the same across the raw and rescaled solution.

based on the above results factor analysis is appropriate for organizational performance.

**Table 3.20.** KMO and Bartlett's Test of Organizational Performance

KMO and Bartlett's Test		Organizational Performance
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.713
Bartlett's Test of Sphericity Approx. Chi-Square		357.815
	df	28
	Sig.	0.000
a. Based on correlations		

#### 3.5.2.11. Rotated Component Matrix for Organizational Performance

As established in *Table 3.21*, the rotation of components was used for the organizational performance construct, as this construct loaded two factors. Outcomes also displayed that the construct has the factor taking values the lower value is (0.711), on *OP2* about the investment board can accomplish a job/task with a minimum expenditure of time and effort. In addition, the higher values are (0.952, 0.898, and 0.820), respectively loaded on *OP8*, *OP4*, and *OP3*, regarding the investment board's gain that gives them abilities to gain competitiveness. The investment board can enhance, and produce goods and services is vital. Additionally, the investment boards have the product quality (as a measure of excellence and state of being free from defects, deficiencies, and significant variations), as revealed in *Table 3.21* below.

Table 3.21. Rotated Component of Organizational Performance

Indicators	Fact	tors
	1	2
OP3	0.820	
OP1	0.814	
OP6	0.802	
OP5	0.774	
OP2	0.711	
<i>OP8</i>		0.952
OP4		0.898
OP7		0.749

# 3.5.2.12. Percentage of Eigenvalue and Variance Explanations for Organizational Performance

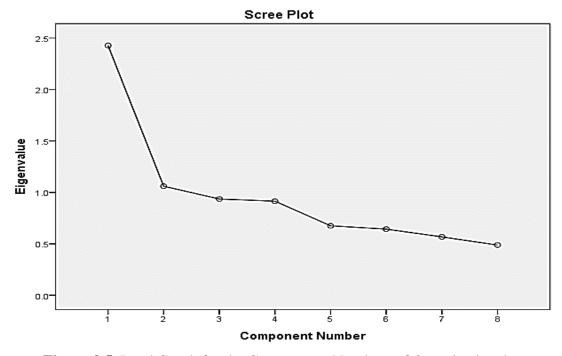
As established in *Fig. 3.5, and Table 3.22*, the eigenvalues were taken as one, or greater values (2.427, and 1.060), as two factors are extracted. The organizational performance total variance explanations reached (45.223%). In addition, the total variance explanations of the first factor embody the highest in the data set. According to this result, we know that the first factor is most substantial in explaining the variable described by (31.478%). The second factor describes lower and reached (13.745%) of the total variance and contains the right components.

**Table 3.22.** Total Variance Explained of Organizational Performance

Factors	Eigenvalues	Variance Explanation%	Cumulative%
1	2.427	31.478	31.478
2	1.060	13.745	45.223
7	-	-	
8	.488	100.000	

**Extraction Method: Principal Component Analysis.** 

 $<sup>{\</sup>bf a}.$  When analyzing a covariance matrix, the initial eigenvalues are the same across the raw and rescaled solution.



**Figure 3.5.** Load Graph for the Components Numbers of Organizational Performance.

## 3.6. Establishing the Model Fit

As a significant and required step, the study model's reliability and validity were established, by average variance extracted (AVE), composite reliability (CR), and Cronbach's α In this regard, the internal validity also checked to find out the correlations between all model constructs and their indicators, in addition, the measurement model was also used. Furthermore, establishing the model fit is recommended by authors before testing study hypotheses (Henseler et al., 2009; Henseler and Sarstedt, 2013; Tharenou et al., 2007). Accordingly, all the suggested values were checked for the evaluated model fit.

As displayed in Table 3.23, the standardized root-mean-square residual (SRMR) in the measurement of the study model was reached (0.076), which is greater than 0.08. The Chi-square value was reached (1.786) that less than three; this result showed a good index and fit for the study model. The value of the normed fit index (NFI) is in the suggested values as higher than 0.90 and closer to 1, for all constructs namely RS, TDS, PES, CRS, IM, EP, and OP, which can be measured as a good and accepted value. Furthermore, the values of variance inflation factor (VIF) for each construct indicator in the study model also ranged between 1.870 to 2.024; all were less than <5. Based on these results the study model was considered a good fit, see *Table 3.23*.

**Table 3.23.** Model Fit Test

<b>Fitness Test Method</b>	<b>Estimated Model</b>	Decision	Overall
		Criteria	Decision
SRMR	0.076	< 0.08	Fit
$X^2$	1.891	≤ 3.0	Fit
VIF	Ranged from 1.870 to	<5	Fit
	2.024		
NFI	1.000	≥ 0.90	Fit

**Note.** SRMR = Standardized Root-Mean-Square Residual,  $\chi^2$  = chi-square, VIF = Variance Inflation Factor, and NFI = Normed Fit Index

# CHAPTER FOUR: DATA ANALYSIS AND RESULTS

The main purpose of this chapter is to conduct statistical analysis, based on empirical data obtained from managers and employees at investment boards in north Iraq, for analyzing the possible correlations between the model constructs or variables. In addition, the empirical data analysis and show results in this study also aimed to clarify the study hypotheses and facts particularly to answer the study's main question and clarify the relationship between the constructs.

## 4.1. Empirical Results

This study is based on empirical data on the perceptions of managers and employees at investment boards in north Iraq regarding the role of human resource management strategies and innovation management in improving employee and organizational performance. In this context, we built a study model and developed hypotheses, thus, in this chapter, we tested the hypotheses, first, we started with the findings of demographic variables. Furthermore, we used descriptive statistics for the study variables such as HRMS, innovation management, employee performance, and organizational performance. As the key purpose, we tested hypotheses, by exploring correlation analysis, direct impact, and mediation analysis, and finally reached the result of hypotheses testing.

## **4.1.1.** Findings of Demographic Variables (Study Subjects)

The subjects of the current study or the demographic variables related to the managers and employees who are working for the branches of investment boards in north Iraq. The investment boards were selected to be the population of the study as they are projected to respond well to HRM strategies, investment boards innovation management, employee, and organizational performance. The investment boards are the suitably targeted population size. Furthermore, the branches of investment boards that provided data through survey questionnaires are general directorate in Erbil, the

Erbil city investment board, Sulamaniya investment board, Duhok investment board, Halabja investment board, and Kirkuk board of investment, see Figures and Table 4.1 below, which show the findings of demographic variables or results of study subjects' profile.

Table 4.1. Findings of Demographic Variables

Profile	Description	Frequency	Percentage	Total
	Male	260	60.7	428
Gender	Female	168	39.3	428
	Less than 30 years	47	11.0	
	31-40	133	31.1	
Age Groups	41-50	152	35.5	428
	51-60	89	20.8	
	61 and above	7	1.6	
	Ph.D.	38	8.9	
Level of	Master	43	10.0	428
Education	Bachelor's degree	279	65.2	
	Diploma Degree	68	15.9	
Current	Management	127	29.68	428
Position	Employee	301	70.32	420
	Less than five years	46	10.7	
	6-10 years	95	22.2	
Overall	11-15 years	126	29.4	428
Experience	16-20 years	105	24.5	
	21 years and more	56	13.1	

The subjects willingly contributed in the survey were male 60.7% (n=260) and female 39.3% (n= 168). The subjects' age group, 35.5% (n= 152) were aged fall in 41-50 years, which is the peak volume. Meanwhile, 31.1% (n= 133) belonged to 31-40 years, 20.8% (n= 89) aged between 51-60. however, 11% (n= 47) aged fall in the group which less than 30 years. Finally, 1.6% (n=7) respondents aged belonged to the last group 61 years and above, see (Fig. 4.1).

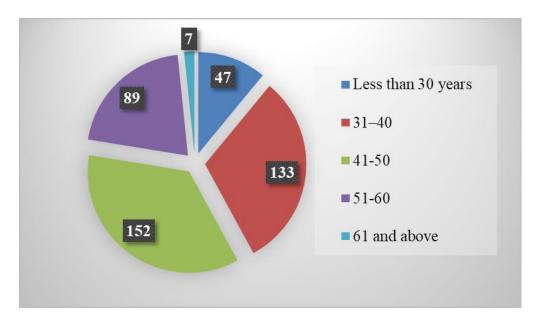


Figure 4.1. The Subjects' Age Groups.

As shown in Figure 4.2 the highest degree of survey sample from investment boards was bachelor degree 65.2% (n= 279), followed by diploma degree holder's 15.9% (n=68), and master degrees 10% (= 43); however, Ph.D. degrees came at last place 8.9% (n=38), of the overall sample

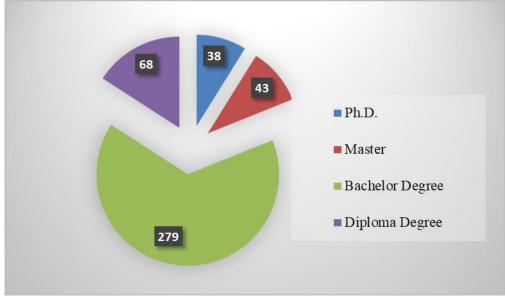


Figure 4.2. The Subjects' Level of Education.

We asked about the current working position of survey participators, 70.32%, (n= 301) revealed that they are employee. While managers were 29.68% (n=127).

Results from Fig. 4.3 showed that 29.4% (n= 126) had experienced between 11-15 years, 24.5% (n= 105) experienced was 16-20 years. In the same regard, 22.2% (n= 95) experienced 6-10 years. While, 13.1% (n= 56) had an experience of 21 years and more, finally, 10.7% (n= 46) had experienced less than five years, (see Table 4.1).

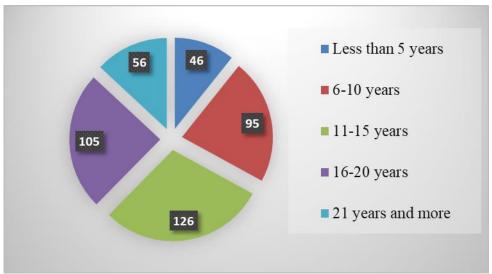


Figure 4.3. The Subjects' Overall Experience.

#### **4.1.2.** Descriptive Statistics

As the first step of empirical analysis, we used descriptive statistics to analyze data obtained in this study, principally to measure the model constructs, but also to facilitate the quantitative description of the key characteristics of the data by using tables and charts to make it easier to understand. According to Gravetter and Wallnau (2000), descriptive statistics are divided into two main sections, one related to the measures of central tendency represented in the values of the calculated mean, and another section concerned with measures like standard deviation, variance, and other values, which indicate how the data is distributed by analyzing it and drawing a curve that includes all these data.

Through using descriptive statistics, we explore the perceptions of managers and employees at investment boards in north Iraq regarding the role of human resource management strategies and innovation management in improving employee and organizational performance. Mainly, we measure the variables' vital features using the statistical mean, standard deviations, and weight in agreement. As

mentioned, all constructs and their indicators are measured with a seven-point scale one indicates completely disagree, and seven as completely agree.

#### 4.1.2.1. Results of the Model Constructs

As summarized in Table 4.2, we applied descriptive statistics for all model constructs by testing the calculated mean, values of standard deviation, and weight of agreement. Results displayed that the constructs of human resource management strategies, namely RS, TDS, PES, and CRS reached high mean values (5.906, 5.767, 5.855, and 5.720), respectively. While the values of standard deviation are (0.7799, 0.7423, 0.9316, 0.8429) respectively. These results indicate that the weight of agreement on HRMS constructs reached (84.38%, 82.39%, 83.64%, and 81.71%), which means that most survey participants agreed on the significance of HRMS.

Effective human resource management strategies depend on the success of the organization's future strategy, as HRMS provides and meets the need of the other departments that make up the organization for appropriate, trained, qualified, and well-motivated human resources (Akhtar et al., 2014) through training programs and policies set by the human resources department to raise and develop the capabilities of these resources (Arnold, 2010), which each department or job within the organization will achieve its strategic goals, and then the organization will achieve its strategic goals including innovation in human resources and enhance the performance of the employees and organization. Human resource management strategies also explain what the organization intends to do about the various aspects of activities related to HRM policies and practices that must be integrated with the strategy of the organization as a whole.

Results presented that the innovation management construct reached high mean and lower standard deviation values (5.864, and 0.5558), respectively. The weight of agreement reached (83.78%) of the total sample responses these results indicate that survey participant at investment boards agreed on the significance of innovation management. Innovation in business organizations has emerged and it has an influential role in all parts of the business organization. Innovation management increases investment efficiency and creates a suitable environment for continuous improvement, which forms the basis for the business organization's success.

Regarding the employee and organizational performances, results showed that both constructs reached high mean values (0.5324, and 0.5274), respectively, with low standard deviation (0.5324, and 0.5274), in this context, (84.71%) of the overall survey samples agreed that organizational performance is important. Results also demonstrated that (83.96%) of the overall survey samples agreed that employee performance is a vital factor for the organization. Employee performance is the achievement and completion of the tasks that make up employees' jobs, and it reflects how the employees are satisfied with the requirements of the job, where performance is of fundamental importance for organizations through the optimal use of their powers and human resources, to become the organization to develop and deal well with all the variables that occur during the completion of the work.

**Table 4.2.** Descriptive Statistics Results of the Model Constructs

					Std.	Weight of
Constructs	N	Minimum	Maximum	Mean	Deviation	Agreement
RS	428	1.00	7.00	5.906	0.7799	84.38%
TDS	428	1.00	7.00	5.767	0.7423	82.39%
PES	428	2.67	7.00	5.855	0.9316	83.64%
CRS	428	2.75	7.00	5.720	0.8429	81.71%
<i>IM</i>	428	4.00	7.00	5.864	0.5558	83.78%
EP	428	3.50	6.92	5.877	0.5324	83.96%
OP	428	3.50	6.63	5.929	0.5274	84.71%

**Note.** RS= recruitment strategy, TDS= training and development strategy, PES= performance evaluation strategy, CRS= compensation and rewards strategy, IM= innovation management, EP= employee performance, and OP= organizational performance.

#### 4.1.2.2. Results of HRMS Indicators

#### 4.1.2.2.1. Results of Recruitment Strategy (RS)

Table 4.3 and Fig. 4.4 presented that the recruitment strategy (*RS*) obtained the top level of importance through its indicators (*RS1-RS5*). The outcomes demonstrated that (*RS1, RS3*, and *RS5*) most agreed indicators were reached (89.14%, 85%, and 84.85%), which means that the managers and employees at investment boards in northern Iraq, who willingly participated in the survey agreed that their department of HRM interests' individuals who have the necessary skills

and experience in key management functions to occupy important positions. The department of HR sets out the conditions for filling each vacancy with applicable laws and circulars. In addition, the HRM is keen to recruit or transfer highly qualified staff to positions with significant creative potential.

**Table 4.3.** Descriptive Statistics Results of HRMS Indicators

					Std.	Weight of
<b>Indicators</b>	$\mathbf{N}$	Minimum	Maximum	Mean	Deviation	Agreement
RS1	428	1	7	6.24	0.588	89.14%
RS2	428	1	7	<b>5.73</b>	0.771	81.85%
RS3	428	1	7	5.95	0.642	85%
RS4	428	1	7	<b>5.67</b>	0.855	81%
RS5	428	1	7	5.94	0.634	84.85%
TDS1	428	1	7	5.63	0.884	80.42%
TDS2	428	1	7	5.83	0.897	83.28%
TDS3	428	1	7	5.64	0.985	80.57%
TDS4	428	1	7	5.79	0.799	82.71%
TDS5	428	1	7	5.95	0.703	85%
PES1	428	1	7	5.97	0.617	85.28%
PES2	428	1	7	5.77	0.826	82.42%
PES3	428	1	7	5.76	0.807	82.28%
PES4	428	2	7	5.81	0.686	83%
PES5	428	1	7	5.75	0.809	82.14%
PES6	428	1	7	5.74	0.834	82%
CRS1	428	1	7	5.75	0.629	82.14%
CRS2	428	1	7	5.73	0.732	81.85%
CRS3	428	1	7	5.70	0.772	81.42%
CRS4	428	1	7	5.70	0.793	81.42%

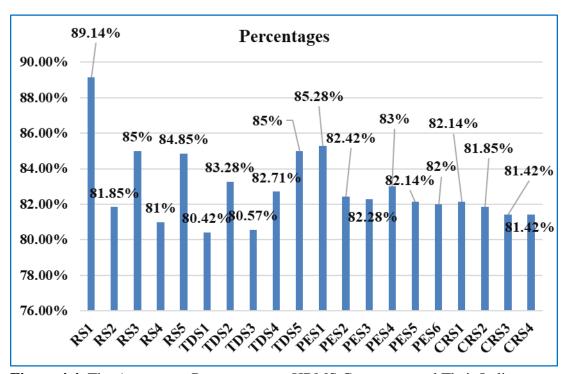
**Note.** RS= recruitment strategy, TDS= training and development strategy, PES= performance evaluation strategy, and CRS= compensation and rewards strategy

Followed by indicators (*RS2*, *and RS4*), respectively achieved a high agreement rate (81.85%, and 81%), these results show that the departments of investment boards apply the method of periodic transfer or selection for new workforces with different experiences. The surveyed boards also emphasize qualitative and quantitative planning to meet their staff needs. Furthermore, recruitment strategy is a major activity that consists of interconnected, integrated sub-activities, the whole of which constitutes a series of works that enable human

resources to provide the organization's needs of human resources of all kinds, and according to specific specifications to fill existing jobs in the organization.

## 4.1.2.2.2. Results of Performance Evaluation Strategy (PES)

As summarized in Fig. 4.4 all indicators of the performance evaluation strategy (PES) reached a high agreement weight, in this regard, indicators (*PES1*, *and PES4*) reached the highest with (85.28%, and 83%), respectively, which means that the investment boards HRM identifies their strengths and weaknesses in the face of emergencies, such as crises. They direct activities to address weaknesses to suit situations. The results established that (*PES2*, *PES3*, *PES5*, *and PES6*) respectively, also reached high percentages of managers and employees who participated in the survey (82.42%, 82.28%, 82.14%, and 82%) these results showed that investment boards diagnose deviations and address them. In addition, the HRM focuses on the professional results of its staff. Furthermore, the performance evaluation system contributed to the development of staff and increases their skills in dealing with emergencies. The performance evaluation system also provides an information base for the formulation and development of policies related to human resource needs.



**Figure 4.4.** The Agreement Percentages on HRMS Constructs and Their Indicators.

## 4.1.2.2.3. Results of Training and Development Strategy (TDS)

Table 4.3, and Fig.4.4 presented that training and development strategy (TDS) attained a high level of significance through its indicators (*TDS1-TDS5*). The results established that (*TDS5*, *TDS2*, and *TDS4*) highest agreed indicators of the TDS construct were reached (85%, 83.28%, and 82.71%), which means that the survey participants agreed that the management of the investment board confirms the times of implementation of training programs. Training needs are also determined through the plan designed for training needs. Additionally, the training needs approved by the HRM department are realistic, practical, and based on the business strategy. Followed by indicators (*TDS3*, and *TDS1*), respectively achieved a good agreement rate of (80.57%, and 80.42%), these results show that the employees in each department undertake one training program for at least twenty hours every year. In the same regard, the HR department develops the necessary training programs to strengthen employees' behavioral patterns to achieve appropriate performance.

## 4.1.2.2.4. Results of compensation and rewards strategy (CRS)

The result in Table 4.3, and Fig.4.4 presented that all indicators of the compensation and rewards strategy (**CRS**) reached good agreement weight, in this regard, indicators (**CRS1**) reached the highest compared to other indicators with (82.14%), which means that the compensation offered by the investment boards is commensurate with the expectations of employees. The results showed that other indicators (**CRS2**, **CRS3**, **and CRS4**) respectively, also reached good percentages (81.85%, 81.42%, and 81.42%) these results showed that compensations are awarded based on the competence of the employees. In addition, the bonus is used as part of a real incentive to reward high performance. Furthermore, the investment boards rely on the performance appraisal system's information to determine the rewards and incentives that distinguished employees deserve.

#### 4.1.2.3. Results of Innovation Management Indicators

As displayed in Table 4.4, all statistical mean values of innovation management indicators are high, and the standard deviations are lower than one. When we look at the results in Table 4.4 and Fig. 4.5, we understand that the

indicators (*IM1*, *and IM5*) reached the highest percentages of (86%, and 85.42%), respectively, which means that the investment boards have precise innovation management policy that applies to all their managers and employees. In addition, they regularly implement new management systems. Followed by (*IM3*, *and IM12*), respectively, both indicators agreed by (84%) regarding the investment boards that regularly make changes to their employees' tasks and functions. In this context, the investment boards implement new ideas and methods and pursue solutions to problems.

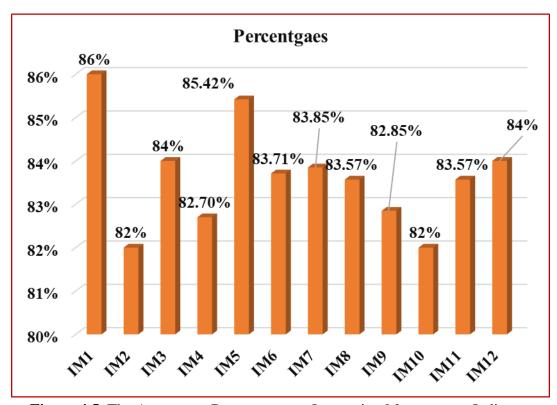
**Table 4.4.** Descriptive Statistics Results of Innovation Management Indicators

					Std.	Weight of
<b>Indicators</b>	N	Minimum	Maximum	Mean	Deviation	Agreement
IM1	428	1	7	6.02	0.582	86%
IM2	428	1	7	5.74	0.828	82%
IM3	428	1	7	5.88	0.722	84%
IM4	428	1	7	5.79	0.880	82.7%
IM5	428	2	7	5.98	0.578	85.42%
IM6	428	1	7	5.86	0.670	83.71%
IM7	428	1	7	5.87	0.724	83.85%
IM8	428	2	7	5.85	0.791	83.57%
IM9	428	1	7	5.80	0.742	82.85%
IM10	428	2	7	5.74	0.936	82%
IM11	428	1	7	5.85	0.839	83.57%
<i>IM12</i>	428	1	7	5.88	0.829	84%

**Note.** IM= innovation management

Fig. 4.5 further presented that (*IM7*, *IM6*, *IM8*, *and IM11*) also most agreed on indicators where they reached (82.85%, 82.7%, 82%, and 82%), respectively which means that the managers and employees at investment boards in northern Iraq, agreed that investment boards management actively pursues to establish research and development units to improve employee and organizational performance. Additionally, the surveyed investment boards have internal and outsourced teams that have the same approach toward innovation management. The investment board suppliers, partnerships, and subcontractors are chosen for their ability to demonstrate

an innovative approach. Thus, there is much scope for the innovation process within the investment boards. However, indicators (*IM9*, *IM4*, *IM2*, *and IM10*), respectively, also achieved a high agreement rate of (81.85%, and 81%), these results show that the innovation process in the investment board is growing from year to year. The investment boards can adopt new innovative ideas to develop work spontaneously and effortlessly. Hence, rules and procedures are regularly renewed. Furthermore, the investment board's primary objective should be innovation in vital business functions.



**Figure 4.5.** The Agreement Percentages on Innovation Management Indicators.

## 4.1.2.4. Results of Employee Performance Indicators

The result in Table 4.5, and Fig.4.6 demonstrated that all indicators of the employee performance (EP) reached a high agreement weight, in this regard, indicators (*EP9*, *EP8*, *and EP1*) reached the highest compared to other indicators with (84.85%, 84.71%, and 84.71%), respectively, showed that the investment boards adopted a policy to encourage employees to present new ideas and methods to improve employee job performance. While they coordinated between the different administrative levels to complete the work as required. Further, employees within

investment board branches complete the tasks assigned to them without delay. The outcomes displayed that indicators (*EP11*, *EP7*, *EP10*, *EP12*, *and EP6*) respectively, reached high percentages (84.57%, 84.42%, 84.14, 84%, and 84%) these results showed that the management of investment boards relatively offered the latest computer and technical systems to complete the work with the required speed and high efficiency. In this regard, the employees have sufficient knowledge of the nature of the work assigned to them. While the adopted systems and rules contribute to the completion of efforts efficiently and effectively. And then the necessary capabilities and skills are available to employees to solve daily problems during work. In addition, investment boards provided an effective incentive system linked to employee performance.

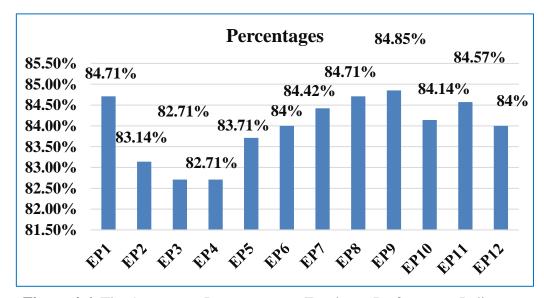
**Table 4.5.** Descriptive Statistics Results of Employee Performance Indicators

					Std.	Weight of
Indicators	N	Minimum	Maximum	Mean	Deviation	Agreement
EP1	428	2	7	5.93	0.910	84.71%
EP2	428	1	7	5.82	0.924	83.14%
EP3	428	1	7	5.79	0.976	82.71%
EP4	428	1	7	5.79	0.975	82.71%
EP5	428	1	7	5.86	0.800	83.71%
EP6	428	1	7	5.88	0.896	84%
EP7	428	2	7	5.91	0.772	84.42%
EP8	428	1	7	5.93	7.710	84.71%
EP9	428	1	7	5.94	0.688	84.85%
EP10	428	2	7	5.89	0.703	84.14%
<b>EP11</b>	428	1	7	5.92	0.896	84.57%
EP12	428	1	7	5.88	0.829	84%

**Note.** EP= employee performance

Furthermore, indicators (*EP5*, *EP2*, *EP3*, *and EP4*), respectively, also achieved a high agreement rate (83.71%, 83.14%, 82.71%, and 82.71%), these results display those skills developed from training programs facilitated employees formulate modern methods of undertaking business. Based on that employees at the

investment boards are prepared to take on higher responsibility. The employees also have the inclination and capabilities to adapt to the changes and new circumstances. Furthermore, the employees at the investment boards perform their duties according to the approved standards. As today's economy forces us to obtain the highest productivity from every employee. Thus, companies and organizations must ensure that each employee works as much as he can and adds value to the organization.



**Figure 4.6.** The Agreement Percentages on Employee Performance Indicators.

## 4.1.2.5. Results of Organizational Performance Indicators

As summarized in Table 4.6 and Fig.4.7 all indicators of the organizational performance (OP) reached a high agreement weight, in this regard, indicators (*OP5*, *and OP4*) reached the highest percentages compared to other indicators with (86.71%, and 86.14%), respectively, presented that the quality of work-life within the investment boards is the opportunity that is given to employees to improve their personal lives through their work environment and experiences that can contribute to an organization's competitive advantage.

While the investment boards can resourcefully generate, create, enhance, and produce goods and services is vital. The results also showed that indicators (*OP1*, *OP2*, *OP8*, *and OP6*) respectively, reached high percentages (84.71%, 84.42%, 84.42%, and 84.14%) these results revealed that the investment boards can yield the desired result as an essential part of the organization. In this regard, they can

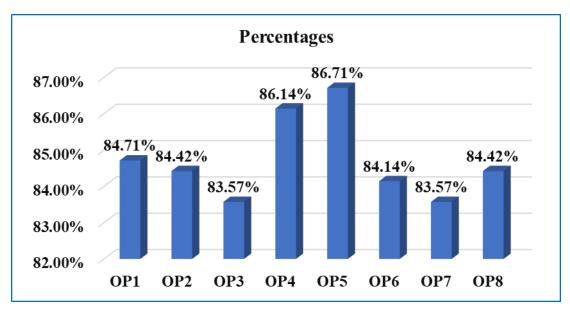
accomplish a job/task with a minimum expenditure of time and effort. In addition, the investment board's profitability is a financial profit or gain that gives an organization the ability to gain a competitive advantage. And then the HRM encourages joint teamwork and participation in providing opinions to improve organizational performance.

**Table 4.6.** Descriptive Statistics Results of Organizational Performance Indicators

					Std.	Weight of
Indicators	N	Minimum	Maximum	Mean	Deviation	Agreement
OP1	428	1	7	5.93	0.809	84.71%
OP2	428	3	7	5.91	0.966	84.42%
OP3	428	2	7	5.85	0.925	83.57%
OP4	428	1	7	6.03	0.953	86.14%
OP5	428	4	7	6.07	0.834	86.71%
OP6	428	2	7	5.89	0.900	84.14%
OP7	428	3	7	5.85	0.960	83.57%
OP8	428	1	7	5.91	0.819	84.42%

Note. OP= organizational performance

Moreover, other indicators of organizational performance such as (*OP3*, *and OP7*), respectively, also achieved a high agreement rate of (83.57%) for each of them equally, these results show that the investment boards have their quality. Besides, the innovation process of the investment, transforming an idea/invention into a product or service that creates value, is vital to survival.



**Figure 4.7.** The Agreement Percentages on Organizational Performance Indicators.

## 4.2. Hypotheses Testing

In this part, we conducted the main statistical analysis to check the study hypotheses based on the data set, which was obtained through a survey instrument to empirically examine the proposed hypotheses that were formed based on the study theories and empirical findings. Therefore, as the first step, we established causal relationships between model constructs. The relationship analysis refers to the strength of the relationships between model variables where a strong and positive relationship means that two or more variables correlated with each other. While weak correlations mean that the variables are hardly related.

#### 4.2.1. Correlation Analysis

We used correlation analysis to establish correlations between model constructs, and as a significant step before testing the impacts of predicted variables on outcome variables. The correlations analysis is the direct relationship between the two or more constructs and sorts the relationship's nature. The correlation coefficient, (r), estimates the relationships between constructs, and the value of (r) is between (+1) and (-1) (Tyrrell, 2009). The results in Table 4.7 displayed positive and significant relationships between all study variables. The direct relationship between

HRMS and innovation management is positive and significant where (r=0.516\*\*, p=0.000), which is the significance value at the level of (0.05).

Results showed a positive and significant relationship between HRMS, employee performance, and organizational performance where (r= 0.543\*\*, and 0.563\*\*) respectively, and p-values (0.000, and 0.000) which are the significance values at the level of (0.05). In addition, Table 4.7 presented that innovation management is positively and significantly related to enhancing employee performance, and organizational performance, with the values (r= 0.585\*\*, and 0.574\*\*) respectively, and p-values (0.000, and 0.000) which are the significance values at the level of (0.05). Furthermore, employee performance is significantly related to improving organizational performance where (r= 0.529\*\*), and p-value (0.000) which is the significance value at the level of (0.05).

**Table 4.7.** Results of Correlations Analysis between model constructs

			HRMS	IM	EP	OP
	HRMS	Correlation Coefficient	1.000			
		Sig. (2-tailed)	•			
Sp	IM	Correlation Coefficient	0.516**	1.000		
Spearman's		Sig. (2-tailed)	0.000	•		
nan's	EP	Correlation Coefficient	0.543**	0.585**	1.000	
rho		Sig. (2-tailed)	0.000	0.000	•	
	OP	Correlation Coefficient	0.563**	0.574**	0.529**	1.000
		Sig. (2-tailed)	0.000	0.000	0.000	•

<sup>\*\*.</sup> Correlation is significant at the 0.01 level (2-tailed).

**Note.** HRMS= human resource management strategies, IM= innovation management, EP= employee performance, and OP= organizational performance

#### 4.2.2. Direct Impact

As an important step before hypotheses testing, we have checked the estimated R<sup>2</sup> values or the determined coefficient of the outcome variables namely innovation management (IM), employee performance (EP), and organizational performance (OP). The value of R<sup>2</sup> determine the prediction of the study model (Hair

b. Listwise N = 428

et al., 2014). As summarized in Table 4.8 the values R<sup>2</sup> for innovation management (IM), employee performance (EP), and organizational performance (OP) are (0.484, 0.328, and 0.546), respectively; these results showed that the study model's R<sup>2</sup> values have established a significant explanation of the empirical data that obtained from managers and employees at the investment boards in northern Iraq.

**Table 4.8.** R<sup>2</sup> Values (Model Summary).

<b>Dependent Variables</b>	R Square	R Square Adjusted
Innovation Management	0.484	0.483
<b>Employee Performance</b>	0.328	0.326
Organizational Performance	0.546	0.544

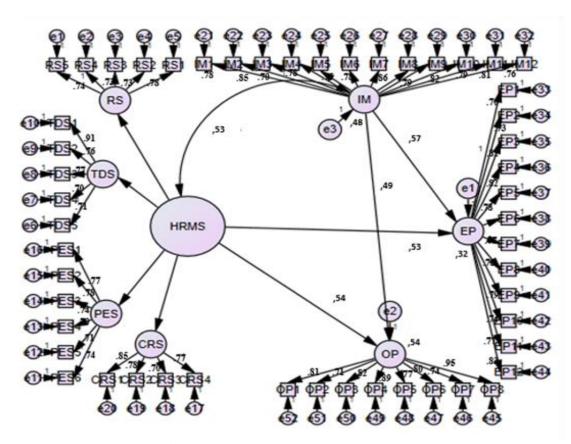


Figure 4.8. The Results of Path Analysis.

Results in Table 4.9 demonstrated that human resource management strategies (HRMS) positively and significantly impacted innovation management

(IM) with the coefficient of impact up to ( $\beta$ = 0.533, p0.000); therefore, the first hypothesis (HI) is accepted, this result displays that the developments in HRMS, namely recruitment strategy, training, and development strategy, performance evaluation strategy, compensation, and rewards strategy by 1% will increase the innovation by 0.533, of the investment boards, as the innovation practices give the organization a wide-ranging framework that permits it to make the required positive changes and works to improve the work results and effectiveness of performances.

Table 4.9. Path Analysis Coefficient, t-value, and p-value for the SEM

Hypotheses	Interaction	Standardized	t-value	p-	Decision
		Path		value	
		Coefficient			
H1	HRMS -> IM	$\beta = 0.533$	13.009	0.000	Supported
H2	IM -> EP	$\beta = 0.572$	14.409	0.000	Supported
Н3	IM -> OP	$\beta = 0.496$	11.786	0.000	Supported
H4	HRMS -> EP	$\beta = 0.534$	13.023	0.000	Supported
Н5	HRMS -> OP	$\beta = 0.545$	13.528	0.000	Supported

**Note.** HRMS= human resource management strategies, IM= innovation management, EP= employee performance, and OP= organizational performance

The results presented that innovation management positively and significantly impacted employee performance with the coefficient of effect ( $\beta$ =0.572, p0.000); hence, the second hypothesis (H2) is accepted. Innovation management in organizations has become a necessity, particularly when organizations want to obtain improved performances and maintain a competitive environment. That the organization's role is to provide an atmosphere that works on developing the capabilities of its members and supports inventiveness and creative thinking (Das et al., 2018). Innovation management is the most important area in enhancing the interaction between the organization and achieving its goals (Karakaş et al., 2017). The results also showed that innovation management positively and significantly impacted organizational performance with the coefficient of impact ( $\beta$ =0.496, p0.000); thus, the third hypothesis (H3) is accepted.

Besides, the result showed that HRMS positively and significantly impacted employee performance with the coefficient of impact up to ( $\beta$ =0.534, p0.000). Consequently, the fourth hypothesis (H4) is accepted. Furthermore, the outcome in Table 4.9 also displayed that HRMS positively and significantly impacted organizational performance with the coefficient of impact up to ( $\beta$ =0.545, p0.000). Thus, the fifth hypothesis (H5) is accepted. Through the implementation of effective HRMS, organizations can emphasize all their human resources and thus improve employee and organizational performances.

## 4.2.3. Mediation Analysis

As shown in Table 4.10, the mediating variable is innovation management, the predicted variable is HRMS, and the outcome variables are employee performance and organizational performance. The results of direct relational impact showed direct correlational impact; therefore, the relational impact was established between HRMS and innovation management; in addition, innovation management related to employee performance, and organizational performance, and the relational impacts were also positive and significant between these constructs.

**Table 4.10.** Inferences for Mediation.

Hypotheses	Interaction	Direct Beta	Indirect	Mediation
		w/o Med	Beta	Type
				Observed
Н6	HRMS -> IM->EP	β=0.534,	β=0.304,	Partial
		p= 0.000	p=0.000	mediation
H7	HRMS -> IM->OP	β=0.545,	β=0.264,	Partial
		p= 0.000	p=0.003	mediation

**Note.** HRMS= human resource management strategies, IM= innovation management, EP= employee performance, and OP= organizational performance

Table 4.10 showed the indirect impact of the existence of the mediation role of innovation management, and the coefficient of impact is up to ( $\beta$ =0.304) with the

p-values (0.000). Hence, the sixth hypothesis (H6) is accepted, which stated that innovation management mediates the HRMS's impact on improving the investment board's employee performance in North Iraq. In addition, Table 4.10 also presented the indirect impact of the existence of mediation role in innovation management, and the coefficient of impact is up to ( $\beta$ =0.264) with the p-values (0.000). Hence, the seventh hypothesis (H7) is accepted, which stated that innovation management mediates the HRMS's impact on improving the investment board's organizational performance in North Iraq.

# 4.3. The Result of Hypotheses Testing

The main effort in this study was to explore human resource management strategies and innovation management. In addition, examine their role in improving employee performance and organizational performance. Before analyzing the study's empirical data, the model's reliability and validity were established, by average variance extracted (AVE), composite reliability (CR), and Cronbach's  $\alpha$ . The internal validity was also checked to find out the correlations between all model constructs and their indicators. Additionally, the measurement model was used.

Following these steps, the study then tested it is main hypotheses, by using SPSS and partial least squares (PLS) path modeling, based on structural equation modeling (SEM). As shown in Table 4.11 the results of hypotheses testing revealed that all hypotheses were supported. The hypotheses H1-H5 comprised the direct correlations between the model constructs namely, the predicted variable, which is human resource management strategies, the mediation variable is innovation management, and two outcome variables employee performance and organizational performance. Hypotheses H6 and H7 involved the mediation role of innovation management in the relationships between human resource management strategies, employee performance, and organizational performance, and all seven hypotheses were accepted.

Table 4.11. Result of Hypotheses Testing

	ootheses	Result Values	Decision
H1	HRMS positively and significantly	$\beta = 0.533$ ,	Accepted
	contributes to the rise of IM in the	P = 0.000	
	investment board in North Iraq.		
<i>H2</i>	Innovation management is positively and	$\beta = 0.572,$	Accepted
	significantly related to employee	P = 0.000	
	performance of investment projects in North		
	Iraq.		
<i>H3</i>	Innovation management is positively and	$\beta = 0.496,$	Accepted
	significantly related to the organizational	P = 0.000	
	performance of investment projects in North		
	Iraq.		
<i>H4</i>	HRMS positively and significantly	$\beta = 0.534$ ,	Accepted
	contributes to improving the investment	P = 0.000	
	board's employee performance in North Iraq.		
<i>H</i> 5	HRMS positively and significantly	$\beta = 0.545$ ,	Accepted
	contributes to improving the investment	P = 0.000	
	board's organizational performance in North		
	Iraq.		
<i>H6</i>	Innovation management mediates the	$\beta = 0.304$ ,	Accepted
	HRMS's impact on improving the	P = 0.000	_
	investment board's employee performance		
	in North Iraq.		
<i>H7</i>	Innovation management mediates the	$\beta = 0.264$ ,	Accepted
	HRMS's impact on improving the	P = 0.000	•
	investment board's organizational	_ 3,000	
	performance in North Iraq.		

#### **CHAPTER FIVE:**

# DISCUSSION, CONCLUSION, AND RECOMMENDATIONS

#### **5.1. Discussions on Findings**

Nowadays, one of the main challenges facing organizations is their ability to adapt to changes and innovations resulting from many environmental factors such as technological, economic, and market forces. In this regard, the human element is one of the most important pillars of adaptation and ensuring the survival and development of organizations. To take advantage of this human resource, the role of human resources management needs to be activated as an effective strategic tool and contribute to improving employee performance and organizational performance and creating a competitive advantage. Therefore, the ultimate purpose of this study was to investigate the role of human resource management strategies and innovation management in improving employee performance and organizational performance based on empirical data were obtained from managers and employees at the investment boards in north Iraq, mainly from the general directorate of the investment boards, Erbil investment board, Sulamaniya investment board, Duhok investment board, Halabja investment board, and Kirkuk investment board.

As a significant and required step, the study model's reliability and validity were established, by average variance extracted (AVE), composite reliability (CR), and Cronbach's α. The internal validity was also checked to find out the correlations between all model constructs and their indicators, additionally, the measurement model was used. Furthermore, the study established the model fit, which was recommended by vast authors as a required step before testing study hypotheses.

The study then tested it is main hypotheses, by using SPSS and partial least squares (PLS) path modeling, based on structural equation modeling (SEM). The hypotheses H1-H5 comprised the direct correlations between the model constructs namely, the predicted variable, which is human resource management strategies, the mediation variable is innovation management, and two outcome variables employee performance and organizational performance. Hypotheses H6 and H7 involved the mediation role of innovation management in the relationships between human

resource management strategies, employee performance, and organizational performance, and all seven hypotheses were accepted.

The effective practices of human resource management strategies depend on the success of the organization's future strategy, as human resource management strategies (HRMS) provide and meet the needs of the other departments that make up the organization for appropriate, trained, qualified, and well-motivated human resources through training programs and policies set by the human resources department to raise and develop the capabilities of these resources. That each department within the organization achieves its strategic goals, and then the organization achieves its strategic goals including innovation in human resources and enhancing the performance of the employees and organizations. Human resource management strategies also clarify what the organization intends to do about the various aspects of activities related to HRM policies and practices that must be integrated with the strategy of the organization.

As HRMS is a comprehensive plan for managing human resources, but according to the recent trends of human resources, which are very concerned with long-term plans and focus on aspects that do not focus on traditional human resource management, the modern human resource strategies must be built on the future (Akhtar et al., 2014). It is also proactive and linked with the company's strategic goals, linked to technology and continuous development in the world, in addition, the modern human resources strategies are a change in the function and functions of the human resources department within the organization, as it is more concerned with attracting and retaining talent to reach organizational innovation and enhances organizational performance (Boxall and Purcell, 2011).

Results on recruitment strategy (RS) presented that the managers and employees at investment boards in northern Iraq, who willingly participated in the survey agreed that their department of HRM interests individuals who have the necessary skills and experience in key management functions to occupy important positions. The department of HR sets out the conditions for filling each vacancy with applicable laws and circulars. In addition, the HRM is keen to recruit or transfer highly qualified staff to positions with significant creative potential. The departments

of investment boards apply the method of periodic transfer or selection for new workforces with different experiences.

The surveyed boards also emphasize qualitative and quantitative planning to meet their staff needs. Furthermore, recruitment strategy is a major activity that consists of interconnected, integrated sub-activities, the whole of which constitutes a series of works that enable human resources to provide the organization's needs of human resources of all kinds, and according to specific specifications to fill existing jobs in the organization. These findings are in line with Chen and Huang (2009), who showed that the recruitment strategy is the significant range of activities and procedures used by the organization to identify employment sources and attract them according to the specific disciplines required in the human resources plan. Also, Katou and Budhwar, (2010) and Rathnawerera (2010) showed that recruiting means picking the best candidates to provide the organization with the organization's planned human resources to fill positions through various advertising means does not mark the end of this strategy's limits.

Empirical findings related to training and development strategy (TDS) displayed that the survey participants agreed that the management of the investment boards confirms the times of implementation of training programs. Training needs are also determined through the plan designed for training needs. Also, the training needs approved by the HRM department are realistic, practical, and based on the business strategy. The employees in each department undertake one training program for at least twenty hours every year. In the same regard, the HR department develops the necessary training programs to strengthen employees' behavioral patterns to achieve appropriate performance.

In this regard, Arnold (2010), mentioned that the development strategy is to increase the workforce's knowledge, skills, and capabilities to work in all areas to raise their productive efficiency to the maximum possible extent. In this regard, developing strategies for HRM is based on the directives of the general plan of HR; thus, the department of human resources draws complete process for its future functions and practices from attracting, selecting, appointing, evaluating, training, and designing business, and motivating employees. The study findings on training are in line with Shahnaei and Long (2015), who mentioned that training strategy is

adapting training programs to develop the organization by forming the human element according to studying its reality, actual needs, and employees' subsidiary needs Training is a systematic process that aims to prepare qualified human elements, or employees in various administrative, professional and technical fields, and to provide the productive sectors with their needs of these elements, and to develop and raise their efficiency. Training is based on three main dimensions: the trainer, the trainee, and training programs that include materials, processes, methods, and other physical and cognitive aspects (Abdullah et al., 2020).

Empirical findings related to performance evaluation strategy (PES) showed that the investment board's HRM identifies their strengths and weaknesses in the face of emergencies, such as crises, and they also direct activities to address weaknesses to suit situations. In this context, survey participators confirmed that their investment boards diagnose deviations and address them. In addition, the HRM focuses on the professional results of its staff. The performance evaluation system, therefore, contributed to the development of staff and increases their skills in dealing with emergencies. The performance evaluation system also provided information for the formulation and development of policies related to human resource needs. These results are similar to Sani (2012) and Ruwan (2007) mentioned that performance assessment is vital for organizations because it played an important role in corporate refining operations through increased efficiency. Companies and organizations can develop desirable employee attitudes and behavior regarding the use of evaluation mechanisms. Teseema and Soeters (2006), in their research, found a positive link between the evaluation of performance and employee performance.

Results of the compensation and rewards strategy (CRS) showed that the compensation offered by the investment boards is commensurate with the expectations of employees. compensations by investment boards are awarded based on the competence of the employees. The bonus is used as part of a real incentive to reward high performance. Besides, the investment boards rely on the performance appraisal system's information to determine the rewards and incentives that distinguished employees deserve. The results in line with Shahzad et al. (2008) found a positive correlation between compensation/reward strategies and performance. Therefore, top management believes that if compensation practices are not adopted

and ignored on an ongoing basis; teacher performance will decline miserably. Compensation is one of the most important factors affecting the motivation of individuals to grow, develop and continue the learning process, and an incentive for greater productivity and striving to improve the performance of the organization (Casio, 2013). In this context, Teseema and Soeters (2006) showed the positive relationship between compensation/ rewards strategies and employee performance. The compensation system motivated employees, which in turn increases organizational innovation.

Results indicated that survey participants at investment boards agreed on the significance of innovation management. Innovation in business organizations has emerged and it has an influential role in all parts of the business organization. Innovation management increases investment efficiency and creates a suitable environment for continuous improvement, which forms the basis for the business organization's success. The empirical results indicated the investment boards have a precise innovation management policy that applies to all their managers and employees.

In addition, they regularly implement new management systems. The investment boards regularly make changes to their employees' tasks and functions. In this context, the investment boards implement new ideas and methods and pursue solutions to problems. These results in line with Weerawardena et al. (2009) showed that innovation management is significant because it can provide a sustainable competitive advantage. Most organizations face abundant competitive problems in their environment, and such problems are because of rapid changes in the environment, especially technological changes. In this regard, managers and employees have to use the power of creativity and innovation to adapt and keep pace with rapid changes, product lines, management practices, and production processes (Hazlett et al., 2005).

The managers and employees at investment boards in northern Iraq agreed that investment boards management actively pursues to establish research and development units to improve employee and organizational performance. Additionally, the surveyed investment boards have internal and outsourced teams that have the same approach toward innovation management. The investment board

suppliers, partnerships, and subcontractors are chosen for their ability to demonstrate an innovative approach. Thus, there is much scope for the innovation process within the investment boards. The innovation process in the investment board is growing from year to year. The investment boards can adopt new innovative ideas to develop work spontaneously and effortlessly. Hence, rules and procedures are regularly renewed. Moreover, the investment board's primary objective should be innovation in vital business functions.

The results presented that HRMS effectively enhances innovation in human elements. HRM represents a significant resource in organizations and is considered one of the organization's intangible assets. Human resources also run a partial organization of the total organizational system, which is an effort between individuals, work, and an attempt to link based on activities with integrated cultural and structural dimensions, which explain into the planning and development programs, the purpose of which is to influence the quality and quantity of work in the organizations towards enhancing innovation efforts and organizational performance (Katou and Budhwar, 2010; Seeck and Diehl, 2017).

In this regard, innovation management played a significant role in enhancing employees and organizational performances. Where innovation in all types of organizations becomes a necessity, mostly when companies and organizations want to improve their performance and maintain business competitiveness (Das et al., 2018). Through innovation in human elements, organizations can focus on all their human capital assets and therefore improve organizational performance (Chen and Huang, 2009).

Regarding the employee and organizational performances, results showed that both constructs reached high mean values. Employee performance is the achievement and completion of the tasks that make up employees' jobs, and it reflects how the employees are satisfied with the requirements of the job, where performance is of fundamental importance for organizations through the optimal use of their powers and human resources, to become the organization to develop and deal well with all the variables that occur during the completion of the work.

The results demonstrated that the investment boards adopted a policy to encourage employees to present new ideas and methods to improve employee job

performance. While they coordinated between the different administrative levels to complete the work as required. Further, employees within investment board branches complete the tasks assigned to them without delay. The management of investment boards relatively offered the latest computer and technical systems to complete the work with the required speed and high efficiency.

In this regard, the employees have sufficient knowledge of the nature of the work assigned to them. While the adopted systems and rules contribute to the completion of efforts efficiently and effectively. And then the necessary capabilities and skills are available to employees to solve daily problems during work. In addition, investment boards provided an effective incentive system linked to employee performance. The skills developed from training programs facilitated employees formulate modern methods of undertaking business therefore, employees at the investment boards are prepared to take on higher responsibility. The employees also have the inclination and capabilities to adapt to the changes and new circumstances. Besides, the employees at the investment boards perform their duties according to the approved standards. As today's economy forces us to obtain the highest productivity from every employee. Consequently, companies and organizations must ensure that each employee works as much as he can and adds value to the organization.

Empirical findings related to the organizational performance presented that the quality of work-life within the investment boards is the opportunity that is given to employees to improve their personal lives through their work environment and experiences that can contribute to an organization's competitive advantage. While the investment boards can resourcefully generate, create, enhance, and produce goods and services is vital.

The results also showed that the investment boards can yield the desired result as an essential part of the organization. In this regard, they can accomplish a job/task with a minimum expenditure of time and effort. In addition, the investment board's profitability is a financial profit or gain that gives an organization the ability to gain a competitive advantage. And then the HRM encourages joint teamwork and participation in providing opinions to improve organizational performance. The investment boards have their quality. Also, the innovation process of the investment,

transforming an idea/invention into a product or service that creates value, is vital to survival.

#### **5.2. Main Conclusions**

The results related to correlations analysis showed positive and significant relationships between all study variables. The direct relationship between HRMS and innovation management was positive and significant. Results showed a positive and significant relationship between HRMS, employee performance, and organizational performance. The results of the correlations analysis presented that innovation management is positively and significantly related to enhancing employee performance, and organizational performance. Additionally, employee performance is significantly related to improving organizational performance. These results showed that HRMS is a significant factor for organizations to influence employees' behavior, and skills, which is essential for organizations to reach innovation in HR. The role of HRMS in organizations is dual that related to the policies, practices, and management efforts to improve employee and organizational performance.

Results demonstrated that human resource management strategies (HRMS) positively and significantly impacted innovation management, this result displays that the developments in HRMS, namely recruitment strategy, training, and development strategy, performance evaluation strategy, compensation, and rewards strategy will increase the innovation. The results presented that innovation management positively and significantly impacted employee performance. Innovation management in organizations has become a necessity, particularly when organizations want to obtain improved performances and maintain a competitive environment.

The results also showed that innovation management positively and significantly impacted organizational performance. Besides, the result showed that HRMS positively and significantly impacted employee performance. Furthermore, the outcome displayed that HRMS positively and significantly impacted organizational performance. Through the implementation of effective HRMS, organizations can emphasize all their human resources and thus improve employee and organizational performances.

Moreover, related to the mediation role of innovation management in relationships between HRMS, employee performance, and organizational performance, the results showed the indirect effect of HRMS on employee performance in the mediation role of innovation management. In addition, the results showed the indirect effect of HRMS on organizational performance in the mediation role of innovation management of the investment board's employee performance in North Iraq.

## **5.3. Managerial Contributions**

As for managerial contributions, the current study provides beneficial information to the branch manager of investment boards in Iraq regarding the significant role of HRMS in the attainment of more involved and creative human capital with improved performances. As results showed that the developments in HRMS effectively enhance innovations in human elements, and innovation management provides an inclusive context that allows organizations and companies to make positive changes and works to improve employee and organizational performance. Thus, the study will also contribute valued information on the relationship between HRMS to innovation management, and performance in Iraq.

The HR department in all investment board branches can attract individuals with sufficient skills and experience to occupy important positions and implement innovations related to their human capital. The investment boards can apply the method of periodic transfer or selection for new employees with different experiences, particularly those who have innovation skills.

The results showed that training and development significantly impact innovation practices and enhance performances. Therefore, investment board branches can develop the necessary training programs to strengthen employees' behavioral patterns to achieve appropriate performance and determine training needs through the plan designed for training human elements. The empirical findings also confirmed the significant role of innovation management in enhancing performances related to employees and organizations. In this regard, the investment boards should adopt the innovation management policies that apply to all it is managers and employees. Based on that investment boards must effectively adopt new innovative

ideas to develop work spontaneously and effortlessly to regularly makes changes to employees' tasks and functions.

#### 5.4. Theoretical Contributions

The current study contributes to the literature related to HRMS, innovation employee performance, and organizational performance by management, demonstrating that empirical study showed that innovation management mediated the HRMS, relationship between employee performance, and organizational performance based on perceptions of managers and employees at investment boards in Iraq. In this context, some empirical studies found that innovation in organizations and companies has become a requirement, particularly when organizations wish to improve their performances. According to Smith et al. (2010) innovation management deal with changes, with new things, with risks, with different outputs, either because they are the first time, try to reach them, or be unique to one occasion. Innovation objectives correspond to common objectives because they are not expected to recur and problematic situations sometimes inspire them because they sometimes contribute to the repair of unacceptable performance.

Innovation management in organizations was not limited to the companies in developed countries but moved to most organizations. Innovation management practices allow organizations to put all their human capital into improving employee and organizational performance (Luecke and Kate, 2003; Thomas, 2011). However, HRMS is a crucial factor for establishments like investment boards and projects to reach goals that include enhancing their performance. The HRMS relationships with innovation management and performance are the vital factor as innovations in the human elements make performance excellence and organizations successful.

## 5.5. Limitations and Suggestions for Future Studies

The current study may not be without limits as the data collection tool was the survey and self-designed. The empirical data were obtained from managers and employees working for the branches of investment boards in northern Iraq. Therefore, the study narrows down its data to explore and find the role of human resource management strategies and innovation management in improving employee

performance and organizational performance. Based on that, the study recommends that future research be conducted in other industrial companies or organizations to explore whether alike conclusions will be reached using consistent and specific purposes. Larger empirical data or samples could produce better findings to the generalization of the results shown in this study. Future research can also use innovation management practices as a mediation mechanism as there is a lack of literature on the mediation role of innovation management practices.

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## **APPENDIXES**

**Appendix 1: Questionnaire Form** 



BİNGÖL UNIVERSITY
GRADUATE SCHOOL OF SOCIAL SCIENCE
BUSINESS ADMINISTRATION DEPARTMENT

## Dear Sir / Madam (Respondent)

I am Zandi Jabbar AZEEZ, Ph.D. student of business administration at Bingöl University. The purpose of this survey is to obtain empirical data based on your perceptions, as a manager/ leader and employee regarding the human resources management strategies (HRMS), innovation management, employee performance, and organizational performance within the organization or all branches of investment boards.

I will be pleased to contribute to the survey by replying to items and questions in which the responses reflect your information. It would have a constructive effect on completing the study at a significant level. Therefore, please reply as sensibly as possible to the following statements by marking  $(\sqrt{})$  in an appropriate place. All answers will keep confidential and used only for scientific study. Also, information about the participants will not be identified.

Thanks in advance for your time.

Sincerely,

Zandi Jabbar AZEEZ

## **General Information** 1. **Gender:** Male ( ), Female ( ). 2. **Age:** Less than 30 years ( ), 31–40 ( ), 61 and ), 41-50 ( ), 51-60 ( above ( 3. **Level of Education:** Ph.D. ( ), Master ( ), Bachelor ( ), Diploma ( ). 4. **Overall Experience:** Less than 5 years ( ), 6-10 years ( ), 11-15 years ( )

This survey consists of 4 parts: Part 1: HRMS, Part 2: Innovation Management, Part 3: Employee Performance, and Part 4: Organizational Performance. In each part, please read the statement and indicate your response to the statement using the scale below:

16-20 years ( ), 21 years and more (

7= Completely Agree, 6=Mostly Agree, 5=Somewhat Agree, 4=Neither Agree nor Disagree, 3=Somewhat Disagree, 2=Mostly Disagree, and 1=Completely Disagree.

Part 1: Human Resource Management Strategies HRMS

Recrui	itment Strategy (RS)							
RS1	The HRM department attracts individuals with	7	6	5	4	3	2	1
	sufficient skills and experience in planning,							
	organizing, and controlling to occupy important							
	positions.							
RS2	The HRM department is applying the method of	7	6	5	4	3	2	1
	periodic selection for new employees with different							
	experiences.							
RS3	The HRM determines the conditions for filling each of	7	6	5	4	3	2	1
	the vacancies by the laws and circulars in force.							
RS4	The HRM department emphasizes qualitative and	7	6	5	4	3	2	1
	quantitative planning to meet its staff needs.							
RS5	The HRM department is keen to appoint or transfer	7	6	5	4	3	2	1
	highly qualified employees to positions with							
	significant creative potential.							
Traini	ng and Development Strategy (TDS)	I						
TDS1	The HRM department develops the necessary training	7	6	5	4	3	2	1
	programs to strengthen employees' behavioral							
	patterns to achieve appropriate performance.							

TDS2	Training needs are determined through the plan	7	6	5	4	3	2	1
	designed for training needs.							
TDS3	Employees in each department undergo one	7	6	5	4	3	2	1
	training program for at least twenty hours every							
	year.							
TDS4	The training needs approved by the HRM department	7	6	5	4	3	2	1
	are realistic, practical, and based on the business							
	strategy.							
TDS5	The management of the investment board	7	6	5	4	3	2	1
	confirms the times of implementation of training							
	programs.							
Perfor	mance Appraisal Strategy (PAS)	1						
PAS1	The HRM identifies its strengths and weaknesses in	7	6	5	4	3	2	1
	the face of emergencies, such as crises.							
PAS2	Deviations are diagnosed and then addressed.	7	6	5	4	3	2	1
PAS3	The HRM focuses on the professional results of its	7	6	5	4	3	2	1
	staff.							
PAS4	The HRM directs its activities to address its	7	6	5	4	3	2	1
	weaknesses to suit situations.							
PAS5	The performance evaluation system contributes to the	7	6	5	4	3	2	1
	development of staff and increases their skills in							
	dealing with emergencies.							
PAS6	The performance appraisal system provides an	7	6	5	4	3	2	1
	information base for formulating and developing							
~	policies related to its human resource needs.							
	ensation and Rewards Strategy (CRS)	1						
CRS1	The compensation offered by the investment board is	7	6	5	4	3	2	1
an an	commensurate with the expectations of employees.							
CRS2	Compensations are awarded based on the competence	7	6	5	4	3	2	1
GP GC	of the employees.	_						_
CRS3	The bonus is used as part of a real incentive to reward	7	6	5	4	3	2	1
CPC 4	high performance.	_						_
CRS4	The HRM department relies on the performance	7	6	5	4	3	2	1
	appraisal system's information to determine the							

rewards and incentives that distinguished employees deserve.

**Source:** Alqadi, Ziad, M. (2012). Relationship of HRM Strategies and Performance of Employees and their Impact on Organization Performance: *Applied Study in Jordan*. Middle East University.

Part 2: Innovation Management IM

IM1	The investment board has a specific innovation	7	6	5	4	3	2	1
	management policy that applies to all it is managers							
	and employees.							
IM2	The investment board can adopt new innovative ideas	7	6	5	4	3	2	1
	to develop work spontaneously and effortlessly.							
IM3	The investment board regularly makes changes to our	7	6	5	4	3	2	1
	employees' tasks and functions.							
IM4	Rules and procedures are regularly renewed.	7	6	5	4	3	2	1
IM5	The investment board regularly implements new	7	6	5	4	3	2	1
	management systems.							
IM6	The investment board has internal and outsourced	7	6	5	4	3	2	1
	teams that have the same approach toward innovation							
	management.							
IM7	The investment board's management actively seeks to	7	6	5	4	3	2	1
	establish research and development units to improve							
	employee and organizational performance.							
IM8	There is much scope for the innovation process within	7	6	5	4	3	2	1
	the investment board.							
IM9	The innovation process in the investment board is	7	6	5	4	3	2	1
	growing from year to year.							
IM10	The investment board's primary objective should be	7	6	5	4	3	2	1
	innovation in vital business functions.							
IM11	The investment board's suppliers, partnerships, and	7	6	5	4	3	2	1
	subcontractors are chosen for their ability to							
	demonstrate an innovative approach.							
IM12	The investment board implements new ideas and	7	6	5	4	3	2	1
	methods and pursues solutions to problems.							

**Source:** Zhang, Y., Khan, U., Lee, S., and Salik, M. (2019). The Influence of Management Innovation and Technological Innovation on Organization Performance. A Mediating Role of Sustainability, *Sustainability*, 11(495), pp.1-21. Goyal, S., and Pitt, M. (2007). Determining the Role of Innovation Management in Facilities Management, available online at emerald.com /insight/ content/doi/10.1108/02632770710716939/full/html, pp.1-13.

Part 3: Employee Performance EP

	. Employee I erjormunce E1							
EP1	The employees complete the tasks assigned to them	7	6	5	4	3	2	1
	without delay.							
EP2	The employees are prepared to take on higher	7	6	5	4	3	2	1
	responsibility.							
EP3	The employees have the inclination and capabilities to	7	6	5	4	3	2	1
	adapt to the changes and new circumstances.							
EP4	The employees perform their duties according to the	7	6	5	4	3	2	1
	approved standards.							
EP5	Skills developed from training programs help	7	6	5	4	3	2	1
	employees formulate modern methods of doing							
	business.							
EP6	The necessary capabilities and skills are available to	7	6	5	4	3	2	1
	employees to solve daily problems during work.							
EP7	The employees have sufficient knowledge of the	7	6	5	4	3	2	1
	nature of the work assigned to them.							
EP8	There is coordination between the different	7	6	5	4	3	2	1
	administrative levels to complete the work as required.							
EP9	The human resources department adopts a policy to	7	6	5	4	3	2	1
	encourage employees to present new ideas and							
	methods to improve employee job performance.							
<b>EP10</b>	The adopted systems and rules contribute to the	7	6	5	4	3	2	1
	completion of work efficiently and effectively.							
<b>EP11</b>	The investment board management provides the latest	7	6	5	4	3	2	1
	computer and technical systems to complete the							
	required speed and high efficiency.							
EP12	There is an effective incentive system linked to	7	6	5	4	3	2	1
	employee performance.							
		1						

**Source:** Saadi, M., Ali M.A., and Saad, M. Abed (2013). The role of Managerial Innovation Strategies in Improving Employee Job Performance. A Field Study in Kufa Cement Factory, *Qadisiyah Journal of Administrative and Economic Sciences*, 15(4), 25-49.

Pradhan, R. K., and Jena, L. K. (2017). Employee Performance at Workplace: Conceptual Model and Empirical Validation, *Business Perspectives and Research*, 5(1), 1-17. SAGE Publications.

Part 4: Organizational Performance OP

<u> I ui i</u>	4: Organizational Perjormance OP							
OP1	The investment board can produce the desired result as	7	6	5	4	3	2	1
	an essential part of the organization.							
OP2	The investment board can accomplish a job/task with a	7	6	5	4	3	2	1
	minimum expenditure of time and effort.							
OP3	The investment board has the product quality (as a	7	6	5	4	3	2	1
	measure of excellence and state of being free from							
	defects, deficiencies, and significant variations).							
OP4	The investment board can resourcefully generate,	7	6	5	4	3	2	1
	create, enhance, and produce goods and services is							
	vital.							
OP5	The quality of work-life within the investment board is	7	6	5	4	3	2	1
	the opportunity given to employees to improve their							
	personal lives through their work environment and							
	experiences that can contribute to an organization's							
	competitive advantage.							
OP6	HRM encourages joint teamwork and participation in	7	6	5	4	3	2	1
	providing opinions to improve organizational							
	performance.							
OP7	The innovation process of the investment, transforming	7	6	5	4	3	2	1
	an idea/invention into a product or service that creates							
	value, is vital to survival.							
OP8	The investment board's profitability is a financial profit	7	6	5	4	3	2	1
	or gain that gives an organization the ability to gain a							
	competitive advantage.							

**Source:** Koohang, A., Paliszkiewicz, J., and Goluchowski, J. (2017). The Impact of Leadership on Trust, Knowledge Management, and Organizational Performance: A Research Model. *Industrial Management & Data Systems*, 117(3), 521-537.