

**The Impact of Human Resource Management Practices  
on the Success of Engineering Projects. The  
Moderator Role of Project Governance.**

**A field study on the Jordanian commercial banking sector**

أثر ممارسات ادارة الموارد البشرية على نجاح المشاريع الهندسية  
الدور المعدل لحاكمة المشاريع  
دراسة ميدانية على قطاع البنوك التجارية الاردنية

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**Thesis Submitted in Partial Fulfillments of the Requirements  
for Master's Degree in Management**

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**Jun. 2022**

## Authorization

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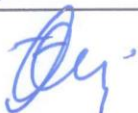


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## Thesis Committee Decision

This thesis entitled “The Impact of Human Resource Management Practices on the Success of Engineering Projects. The Moderator Role of Project Governance” was successfully defended and approved on ( 12 / 06 / 2022).

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## Dedication

الإهداء

الى من كلفه الله بالهبة والوقار.. إلى من علمني العطاء بدون انتظار.. إلى من أحمل أسمه بكل افتخار... لمن علمني كيف أمسك بالقلم... و كيف أخط الكلمات بلا ندم.. لمن تمنيت بأن املاً عيناه بنجاحي هذا .

لروحك يا أبي الفاضل....

الى معلمتي الاولى ، الى من دعائها سر نجاحي وتوفيقي ، إلى حكمتي وعلمي ، الى ادبي وحلمي ، الى طريقي المستقيم .

اليك يا أمي ....

الى اخواني واخواتي (محمد، رامي، هديل، هيا) عائلتي، الجدار المنيع الذي استند عليه...

الى رفيقة الكفاح والنجاح، الى من انتظرت الغد المشرق بصبر، وهي تغرس في نفسي العزم والتصميم والمثابرة

زوجتي الحبيبة أسماء ....

إلى الاصدقاء والى كل من قدم لي العون في انجاز هذه الرسالة.

هاني رسمي قاسم

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### **List of Apreviations**

|     |                             |
|-----|-----------------------------|
| HRM | Human resource management   |
| EPS | Engineering project success |
| SA  | Selection and apointment    |
| TD  | Training and development    |
| CS  | Compensation system         |
| PG  | Project Governance          |

### **List of Appendices**

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## **Abstract**

This study aimed to identify the impact of human resource management practices on the Success of Engineering projects by the moderating role of Project Governance in the Jordanian commercial banking field. To achieve the goals of this study, the researcher relied on a descriptive and analytical approach.

The study dealt with employees of Jordanian commercial banks. The population consisted of all employees related to projects inside the bank; due to a large population, convenient sample was chosen. Moreover, the questionnaire was the study's primary tool for collecting data, (400) questionnaires were distributed, (386) answers were regained, and the valid questionnaire for analysis was (379). The data was analyzed and conducted by using (SPSS-V26) software.

The research reached a set of results, the most important of which are:

- 1- There is a statistical impact at the significance level ( $\alpha \leq 0.05$ ) of HRM practices (selection and appointment, training and development, and Compensation system) on the success of engineering projects in Jordanian commercial banks
- 2- There is a statistical impact of HRM practices on E,project success with the presence of Project governance as a moderator variable in Jordanian commercial banks, at a significance level ( $\alpha \leq 0.05$ )

The research recommended the following:

- 1- The need to continue enhancement to the (selection and appointment, training and development and compensation system) through the commercial banking field and understand the importance of the (selection and appointment, training and development and compensation system) to increase the success of E.projects in the commercial banking field.
- 2- Jordanian commercial banks must continue to pay more effective mechanisms in selecting and appointment of project personnel, which (selection and appointment) have the lowest value in the study results.

- 3- Jordanian commercial banks must proceed permanently with the implementation of (a compensation system and training and development), which have a clear and compelling impact on the success of E.projects in Jordanian commercial banks, as shown in the study results.
- 4- The study results show that Jordanian commercial banks have effective governance that ensures E.project success, which practically impacts the independent variables (selection and appointment, training and development, and Compensation system).

**Keywords: HRM practices ( selection and appointment, training and development, Compensation system), project governance, Jordanian commercial banks sector .**

## أثر ممارسات ادارة الموارد البشرية على نجاح المشاريع الهندسية. الدور المعدل لحاكمية المشاريع. دراسة ميدانية على قطاع البنوك التجارية الاردنية

إعداد: هاني رسمي قاسم

إشراف: الأستاذ الدكتور شفيق الحداد

### الملخص

هدفت هذه الدراسة إلى التعرف على أثر ممارسات إدارة الموارد البشرية على نجاح المشاريع الهندسية من خلال الدور المعدل لحاكمية المشاريع في مجال البنوك التجارية الأردنية. ولتحقيق أهداف هذه الدراسة اعتمد الباحث على المنهج الوصفي والتحليلي.

تناولت الدراسة العاملين في البنوك التجارية الأردنية، حيث تألف مجتمع الدراسة من جميع الموظفين المرتبطين بمشاريع داخل قطاعات البنوك، ونظرا لكبر حجم مجتمع الدراسة، تم اختيار عينة مقبولة . وكان الاستبيان هو الأداة الرئيسية للدراسة في جمع البيانات، حيث تم توزيع (400) استبانة، وتم الحصول على (386) إجابة وكان عدد الاستبانات المستخدمة في التحليل هو (379). حيث تم تحليل البيانات وإجرائها باستخدام برنامج (SPSS-V26).

توصلت الدراسة إلى مجموعة من النتائج أهمها:

هناك أثر ذو دلالة إحصائية عند مستوى الدلالة ( $\alpha \geq 0.05$ ) للعوامل المستقلة، ممارسات إدارة الموارد البشرية (الاختيار والتعيين، والتدريب والتطوير ونظام التعويضات) على نجاح المشاريع الهندسية في قطاع البنوك التجارية الأردنية.

هناك أثر ذو دلالة إحصائية عند مستوى الدلالة ( $\alpha \geq 0.05$ ) لحاكمية المشاريع في تحسين تأثير العوامل المستقلة (الاختيار والتعيين، والتدريب والتطوير ونظام التعويضات) على نجاح المشاريع الهندسية في قطاع البنوك التجارية الأردنية.

أوصت الدراسة بما يلي:

1- ضرورة الاستمرار في تعزيز نظام (الاختيار والتعيين والتدريب والتطوير والتعويضات) في مجال البنوك التجارية وفهم أهمية نظام (الاختيار والتعيين والتدريب والتطوير والتعويضات) لزيادة نجاح المشاريع الهندسية.

2- على البنوك التجارية الأردنية أن تستمر في الاهتمام بالقيام بآليات أكثر فاعلية في (الاختيار والتعيين) ، حيث كان لها أقل قيمة في نتائج الدراسة.

3- على البنوك التجارية الأردنية أن تمضي بشكل دائم في اتباع وتنفيذ (نظام التعويض والتدريب والتطوير) لما له من أثر واضح وفعال على نجاح المشاريع الهندسية في البنوك التجارية الأردنية كما هو مبين في نتائج الدراسة.

4- تتمتع البنوك التجارية الأردنية كما هو مبين في نتائج الدراسة بحوكمة فاعلة تضمن نجاح المشاريع الهندسية ولها تأثير فعال على المتغيرات المستقلة (الاختيار والتعيين، التدريب والتطوير ونظام التعويضات) لذلك يجب على البنوك التجارية الاستمرار قدما في تطوير وتوسيع مجالات الحاكمية لضمان نجاح المشاريع الهندسية.

الكلمات المفتاحية: الاختيار والتعيين، التدريب والتطوير، نظام التعويضات، حاكمية المشاريع، قطاع البنوك التجارية الأردنية.



## **CHAPTER ONE**

### **Background**

# **Chapter One**

## **Background**

### **1-1 Introduction**

Human resources are a company's most valuable asset in today's business environment, which it employs essentially to achieve its objectives (Pfeffer, 1994). The basis of competitiveness is shifting due to the ever-increasing rate of technological advancement (Tajeddini and Ratten, 2017). However, modern organizations must adhere to human resource management (HRM) practices to achieve optimal performance goals; this will significantly improve employee performance and ultimately improve organizational / project success (Delery and Doty, 1996). Depending on the scenario under consideration, these human resource management methods may represent a reward system. Sometimes, their goals can only be achieved through employee training and development (Pirzada et al., 2013).

Human resources (HR) is the essential asset (Swathi, 2014). Managing it is a significant challenge compared to technology and capital management and varies from organization to organization. Jianjian, Chunlu, David. (2007) explains that Human Resources Management (HRM) deals with managing people in an employer-to-employer relationship. Specifically, it concerns employee performance to achieve the company's goals and satisfaction with employee needs (Jianjian et al., 2007). In HRM practice, an overview of the system intrigues, persuades, trains, and maintains employees and ensures that the organization's staff is playing their part in achieving the overall goals of the business. (Veth et al., 2017).

Literature and scientific articles on project management suggest that the practice of HRM introduced by the project organization enhances the working environment of the project (Ahmad, 2017).

Khan and Rasheed (2015) found that selected HR practices (employee selection and appointment , employee training and training, employee compensation systems, and employee performance assessment) influence awareness of project success. Found to give. Analysis has shown that project-based organizations are unusual, so only selected HR practices are essential.

The success of the project is important to ensure that what is offered is accurate and adds real value to the opportunity. Every organization has strategic goals, and the projects we are working on for them move those goals forward. The success of the project is important to ensure consistency in properly designing the project to better fit into the broader context of the organization's strategic framework. The success of the project ensures that the goals of the project are closely aligned with the strategic goals of the company (Joslin & Muller, 2016). By defining a solid business case and systematically calculating the ROI, the success of the project is very important as it helps to provide the right thing and the true value.

The relationship between project governance and management and its success has recently attracted the attention of researchers. Project governance is often defined as a system of values, structures, processes, and policies that enable a project to achieve an organization's goals (Müller, 2016).

According to Klakegg et al. (2009) Governance begins with corporate governance from the board of directors to the top management level in charge of implementation and the project management level, and covers all aspects of the organization.

## **1-2 Problem Statement**

When Discussing engineering project's success requires human resource management that has a close relationship with it by integrating its practices, This led to several studies in this context that proved the great importance of human resource management for the project's success, but researchers in this field were divided into two groups. The first group said that the practices of human resource management is an essential factor in the project's success such the study of Khan and Rasheed (2015), but the second team believes that there is no clear relationship between them. With this study, our research paper makes this relationship natural. The relationship between human resource management practice and the project's success in the research sample that we are trying to retest.

So There is a knowledge and field gap focused on the impact of human resource management practices on success of Engineering projects. Such a challenge appears to have no end. Based on HR practices, this research is being conducted to solve the difficulty mentioned above, mainly related to project success.

## **1-3 Study Objectives**

1. To identify the impact of human resources practices on E.project's success in the Jordanian commercial banking sector.
2. To study the impact of each HR practice on E.project success in the Jordanian commercial banking sector.
3. To rank these HR practices and assess their contributions to E.projects' success in the Jordanian commercial banking sector.

4. To investigate the moderating role of project governance in the impact of HRM practices on E.project success.

## **1-4 Study Significance**

This study has additional significance and value represented by the following points:

### **First: The scientific significance**

- Contribute to enriching the Arab library in general and the Jordanian in particular by increasing the number of studies on the impact of human resource management practices on the success of E.projects, as far as the researcher knows.

### **Second: The practical significance**

- The importance of this study lies in raising the awareness of human resources management practices in Engineering projects
- The importance of this study is seeking to determine if there is a significant impact of HRM on Engineering projects.
- Participate in improving the performance of projects in Jordanian commercial banking sectors.

## **1-5 Study Questions and Hypotheses**

This study tried to examine the following questions derived from the problem statement; the first key question:

**Q1:** Is there an impact of HRM practices on the success of Engineering projects in Jordanian commercial banks?

The following questions can be derived from the vital query above:

**Q1.1** Is there an impact of (selection and appointment) on the success of Engineering projects in Jordanian commercial banks?

**Q1.2** Is there an impact of (training and development) on the success of Engineering projects in Jordanian commercial banks??

**Q1.3** Is there an impact of the (Compensation system) on the success of Engineering projects in Jordanian commercial banks??

The second key question:

**Q2:** Does project governance moderate the impact of HRM practices on Engineering projects success?

### **Study hypotheses:**

To examine the direct relationships between the study variables, the following hypotheses have been proposed:

**H01:** There is no impact of HRM practices (selection and appointment, training and development, and Compensation system) on the success of Engineering projects in Jordanian commercial banks at ( $\alpha \leq 0.05$ ).

The following sub –hypotheses are derived from the key hypothesis above:

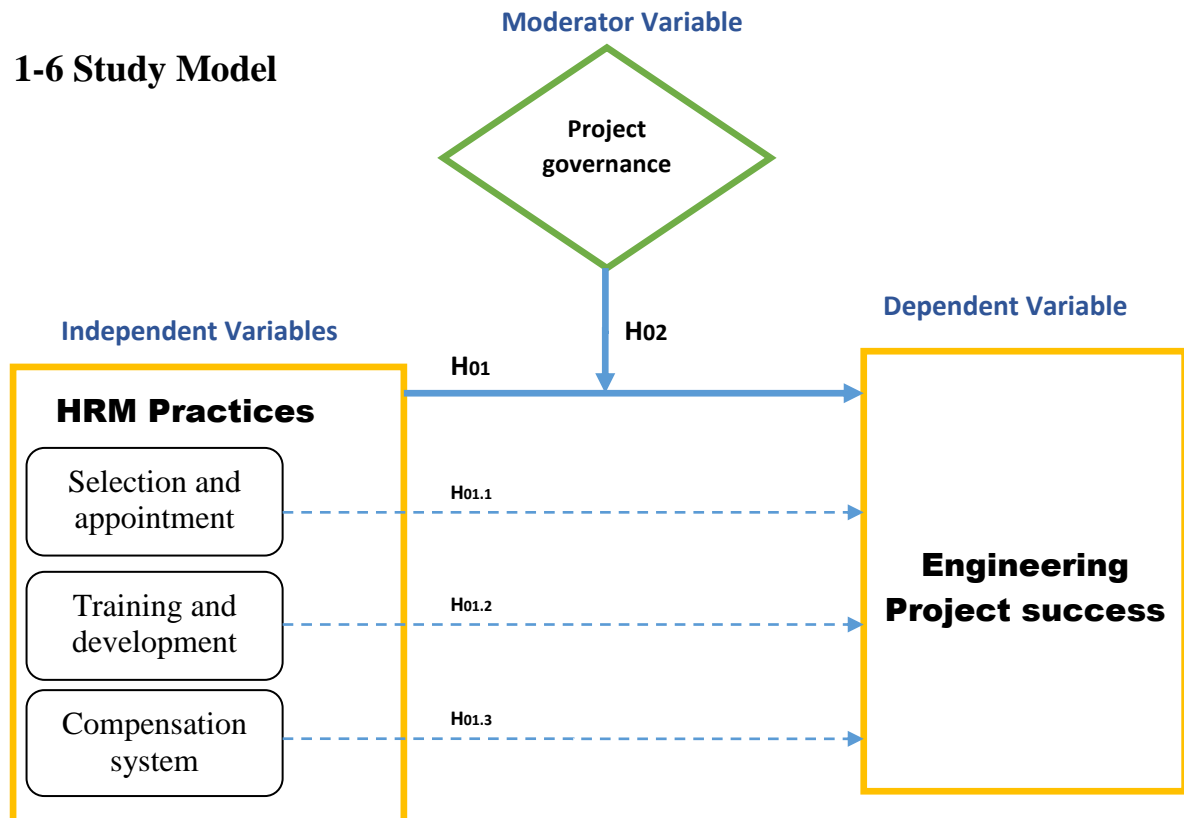
**H01.1:** There is no impact of selection and appointment on the success of Engineering projects in Jordanian commercial banks at ( $\alpha \leq 0.05$ ).

**H01.2:** There is no impact of training and development on the success of Engineering projects in Jordanian commercial banks at ( $\alpha \leq 0.05$ ).

**H01.3:** There is no impact of the compensation system on the success of Engineering projects in Jordanian commercial banks at ( $\alpha \leq 0.05$ ).

**H02:** Project governance does not moderate the impact of HRM practices (selection and appointment, training and development, and compensation system) on the success of Engineering projects in Jordanian commercial banks at ( $\alpha \leq 0.05$ )

## 1-6 Study Model



**Figure (1-1): Study model**

**The researcher prepared the model based on the review of the sources below**

the model's structure was adopted from the following studies

(Aftab, Sarwar, Shahid, 2016; Khan and Farooq, 2014; Yang et al., 2015) for HRM ;manju patel 2016 (for PG )

## 1-7 Study Limits

1. Place limits: The spatial boundaries for this are to study construction projects' success located in Jordan.
2. Time limits: The study was conducted in a short time from ( oct2021-jun2022).
3. Scientific limits: the study variables were (selection and appointment, training and development, and Compensation system) as independent variables and Engineering project success as a dependent variable, overlooking some variables that might influence the Engineering project's success.

## 1-8 Study Delimitations

1. This study applied to employees working in Jordanian commercial banking sectors.
2. According to the researcher's knowledge, Arab libraries lack studies that deal with the impact of (selection and appointment, training and development, and compensation system) on the success of the projects in Jordanian commercial banks, with the moderating role of project governance.
3. The study was conducted at a commercial bank in Jordan, raising questions about the possibility of applying the results of this study to commercial banks in various countries.

## 1-9 Study Conceptual Definitions

**Selection and appointment:** Researchers consider this practice to be one of the essential practices in a project because it contributes to the effectiveness and thus the success of the achievement of project objectives (Huemann et al., 2007; Khan & Rasheed, 2014); therefore, project management should adopt a specific, effective, transparent and objective system of selection. To obtain the required combination of quantity and human resources (Contreras et al., 2015)

**Training and development:** Training is defined as the process of teaching skills and providing the necessary knowledge or behavior to enable people to fulfill their assigned responsibilities in their current occupation and to comply with the standards required. Alternatively, development should provide people with the necessary knowledge, skills, and experience to assume broader roles and responsibilities with greater demands (Kashawi, 2006).



**Compensation system:** Compensation can be defined as all financial, reward, and non-monetary benefits an organization provides to its employees (Casio, 2013, P330).

**Engineering project Success:** Jugdev and Muller (2005) defined the success of a project as "good art" and added that the concept has evolved over the years from a simple idea to a new one that reflects aspects of the project's success. A study (Kamau and Mohamed, 2015) defined the PS as completing project work on time, cost, and quality and achieving customer satisfaction and meeting organizational goals.

**Project Governance :**refers to “Involving a set of relationships between a company's management, its board, its shareholders and other stakeholders [...] and should provide proper incentives for the board and management to pursue objectives that are in the interests of the company and its shareholders and should facilitate effective monitoring OECD (2004)”

## **Chapter TWO**

### **Theoretical framework and previous studies**

This chapter is divided into five main sections, as follows:

2-1 first section: talked about the independent variables, where is human resource practices (“Selection and appointment,” “Training and development” and Compensation system), their importance, and their dimensions.

2-2 second section: The dependent variable (Engineering Projects Success) and its importance.

2-3 third section: It talked about the moderating variable (Project governance) and its importance.

2-4 fourth section: Previous studies (previous Arabic and English studies).

2-5 fifth section: Discuss the differences between previous studies and current conducted study

## **Chapter TWO**

### **Theoretical framework and previous studies**

#### **2-1 Human resource management practices.**

##### **2-1-1 Preface**

HRM practice outlines a system that fascinates, persuades, develops, and retains. Human resources to ensure that the organization's staff play their part in achieving the company's overall goals (Veth et al., 2017). Project management Literature and scientific articles suggest that HRM practices are integrated into the project organizations and reinforce work environs (Ahmad, 2017). It was found by several researchers in the studies conducted in the field of HRM that the investment has been made in how HRM practices lead to project success (Datta et al., 2003). Wright et al. (2003) argue that the success of any project depends on employee commitment and dedication.

The concept of HRM has attracted enormous attention and has stimulated significant debate between academicians and practitioners. Much of the discussion has been around the meaning of HRM, yet there is no single universally accepted definition of the concept. Literature suggests a range of definitions; some of these equate Human Resource Management (HRM) with Personnel Management (PEM), while others reflect altogether different concepts. However, the philosophies and practices of the latter concept provide fundamentals for the philosophy and practices of HRM. Personnel Management characteristically focuses on a range of activities relating to the supply and development of labor to meet the organization's immediate and short-term needs. Recruitment and selection, training, compensation, and others are considered separate individual functions. HRM aims to integrate all employee functions into one strategy. In

addition, it treats employees like individuals by maintaining personal records and work-related activities. On the other hand, it considers the entire organization a focal point for analysis.

From a different perspective, HRM has been defined as a process of developing an individual's abilities and attitudes, leading to personal growth and self-actualization, enabling the individual to contribute to their goals. Organization. The concept of HRM to better understand human needs and expectations must be developed and reinforced.

A Chinese proverb says, “If you wish to grow something for a season, grow mangoes. If you wish to grow something for a year, grow rice, but develop human resources if you wish to grow something for a lifetime.”

### **2-1-2 Selection and Appointment, Training and Development, Compensation System concepts.**

**Selection and appointment (SA):** is considered the primary HRM function (Ahmed, 2015). This refers to choosing the right candidate for the right job with the right skills and ability to perform and contribute to the success of the project can only be done through high-level recruitment and selection (Holzer, 1987). HRM helps to define the requirements of different projects. This improves the alignment of competencies and their development to fit the criteria (Gemünden et al., 2018). However, construction works often practice their own HRM standards and procedures, but it has been observed that an informal approach to recruitment and selection is common in these works projects (Lockyer and Scholarios, 2007). Therefore, the selection of the project manager and his team members is particularly important in the context of a project. Because project managers are essential to project success, this requires, in addition to technical expertise in project management, to be very efficient and proficient in managing time and resources, as well as the ability to organize,

supervise, control, make decisions, communicate effectively and lead teams (Fabi and Pettersen, 1992). At this point, you need to select a team with high-level skills and competencies to achieve the project's goals and contribute to its success.

There are different selection and appointment sources such as employee referrals, newspaper ads, or direct applications. Various alternative sources also exist, such as re-hiring, internships, employment agencies, and more. (Klaus, 2005). In the early stages of the recruitment process, companies try to attract job seekers to the pool of candidates (Rynes, 1991). This selection process affects the performance of the organization. The selection process can vary from company to company, but The goal is to choose the right person for the proper position. Various studies on selection methods have influenced the relationship between candidates and companies (Gilliland, 1993; Herriot, 1989). Selection procedures can also help find commonalities and adjustments (Schneider, 1987). White & Doyle (1997) studied five specialized groups and established preferences for informal people, collaborators, and "word of mouth" interviews; there is no conservative concept of harshness in selection. Different companies use different selection processes; for example, Nike used interactive voice feedback (IVR) technology followed by computer-aided interviews with candidates. Finally, candidates are selected, and finally, face-to-face interviews (Thornburg, 1998). On the other hand, companies such as the US Department of the Interior and the Department of Defense use several technologies, such as telephony, IVR, and computer-based adaptive testing (Frost, 1997).

Identifying the right candidate with the skills necessary to perform the job for effective organizational performance results in a complex selection system (Holzer, 1987) that signals a message about the importance of HRM to the organization (Pfeffer,

1994). A mismatch between people and jobs can slow down performance levels (Lado and Wilson, 1994). In contrast, a complex selection system can ensure a better match between one's abilities and the organization's requirements (Fernandez, 1992).

More focus on developing transparent procedures, Comprehensive job analysis, and personnel planning followed by transparent allocation of responsibility for the selection process (Iles et al. 1997, Sels et al. 2003). On the other hand, one of the big mistakes of management is not appointing the “right person, the right job” (Stone, 2002). The recruitment and selection process should be guided by the job analysis. In-depth research can be beneficial in identifying key job elements for building job descriptions. These factors help the screener determine the required skills, attitudes, and physical and mental characteristics that an applicant must possess. A good selection process is positively related to organizational performance. Still, the process is becoming increasingly complex, and its integration into corporate strategies and human resources ensures the success of the organization. With proper consideration of organizational, economic, social, and political contexts, getting the right candidate into the right job is a delicate and ongoing activity for HRM professionals (Terpstra & Rozell), 1993).

After reviewing the research done by (Holzer, 1987; Pfeffer, 1994; Lado & Wilson, 1994; Fernandez, 1992), selection and appointment were added as independent variables in this study. To achieve competitiveness at the national and even international level, organizations must employ effective recruitment and selection processes. Otherwise, the results can be pretty disappointing or disastrous.

### **Training and Development (TD):**

“Training is something we hope to integrate into every manager’s mindset.”  
(Chris Landauer)

Training is an important part of knowledge acquisition, whereby employees gain valuable information and expertise to implement professional obligations. This may also be due to the fact stated by "human capital theory that knowledge acquired through training increases income (Khan et al., 2017). Therefore, employees must transfer the skills and abilities learned and developed in the training process to practical application in the performance of their jobs and responsibilities. Therefore, most studies emphasize the importance of staff training and development in the context of a project. It is one of the practices that contribute to increasing productivity, reducing costs, and motivating employees (Fabi & Pettersen, 1992; yang, 2014).

Organizations can enhance the knowledge and skills of their workforce using various training and development programs (Donate et al., 2016). Wright et al. (2003) advocate that training is a logical and orderly way to enhance knowledge, skills, and abilities, ultimately helping the workforce perform assigned tasks.

Training is key to meeting the needs, knowledge and skills of employees in an organization and training programs are expected to provide many benefits including employee development, increased productivity and improve employee performance. However, these programs represent an expensive investment and there are growing concerns about the cost and effectiveness of training (Elangovan and Karakowsky, 1999).

Training is a huge and expensive activity, affecting a huge workforce at all times (Tobias & Fletcher, 2000). Although some researchers have shown that there is a negative relationship between training and organizational performance, based on different findings and theories, an argument can be developed, that training creation is one of the key predictors that equip an organization and its employees with the modern

skills needed to predict their performance, which can make a significant difference. Included in the activities of the organization. Many organizations are turning to training and development for strategic assets and high levels of performance (Brown, 2005). Practitioners and researchers are investing a great deal of money, effort and time in understanding the nature of employee training over the past 30 years (Emadi, et al. 2007). In this study, training and development are considered as an independent variable to examine the contribution of T&D to the project success.

Given the high costs involved in developing and implementing training programs, it is essential to better understand the factors that combine to create an effective training program (Arthur et al., 2003).

#### **Compensation system (CS):**

“Compensation is employee cheerfulness against the work they contribute in the Company equity accounts”.

A compensation system is an incentive received for services rendered to the organization (Subramaniam et al., 2016). It motivates employees towards performance and, ultimately, organizational effectiveness (Masood, 2010). Organizations also enhance employee motivation through training and random offset (Shin and Konrad, 2017). So there is a clear consensus among many researchers about the positive effects of the compensation system on the success of the project, as the compensation system has a positive impact on employee performance and enhances the effectiveness of functional and organizational processes. And so, they found out it also plays an important role in uniting, maintaining, facilitating, and motivating teams to reach project goals assessed in terms of quality, cost, time, and employer satisfaction (Popaitoon & Siengthai, 2014; PMI, 2016).



Compensation plays an important role in motivating employees and thus enhancing organizational effectiveness (Lawler, 1971; Milkovich & Newman, 1996). Different factors need to be considered when compensating an employee, i.e., job performance, relationship with co-workers, manager relationship, and individual needs. Compensation can be used to retain skilled workers, increase or maintain satisfaction, incentivize top performance, reduce revenue, and incentivize company loyalty. Compensation may vary for different workers depending on their qualifications and type of education, experience, and formal training (Pedro & Vicente, 2007). Many stock-based compensation plans are commonly used for employees. These plans include employee stock options plans, employee stock purchase plans, limited stock plans, employee stock ownership plans, and qualified retirement plans under different standards. These are extended plans and can be classified as non-retirement and retirement plans depending on when the employee is entitled to receive its advantage (Mélissa, 2004).

Employee compensation often includes many components: base salary, annual bonus, stock options, and other long-term incentive plans. Employee stock options (ESOs) are used to motivate employees to high levels of performance and retain talented employees (ChihYing, 2003).

Compensation is the outcome (reward) that employees receive in exchange for their work. The latest trend seems to be that performance-related pay is included in employee evaluations (Alen, 1998). Many studies have provided evidence that incentive compensation has an impact on firm performance (Gerhart & Milkovich, 1992; GomezMejia, 1998; Milkovich & Boudreau, 1998). Traditional compensation schemes and methods have no connection to performance management systems, and rewards are

awarded based on seniority and position. In contrast, rewards are now awarded on a performance basis. Performance rewards are a better motivational tool because employee effort is tied to performance. Therefore, those who do a good job receive rewards, and employees appreciate these rewards.

## **2-2 Engineering Project Success (EPS)**

Forty years of research have revealed a host of new success factors and broadened the number of success criteria. Project success here is seen as the result of a combination of objective and subjective measures, expressed in success criteria and measured at the end of a project (Muller and Judgev, 2012). However, the success rate is still not as expected. For this reason, researchers began to broaden the range of possible success factors and focus more on the structural features of the project context and its impact on success.

There are many definitions for project success as a project's success has been traditionally defined as a project that meets its objectives under budget and schedule, and it means the effectively and efficiently achieving all project objectives in scope, on time and within budget (Larson and Gray, 2015). The factor in a project's success comprises five sub-dimensions (project efficiency, organizational benefits, project impact, potential, and stakeholder satisfaction) (Joslin & Muller, 2016).

Project success is important to ensure that what is delivered is correct and will add real value to the business opportunity. Every organization has strategic goals, and the projects we work on for them drive those goals. Project success is important because it ensures consistency in designing projects properly so that they fit well into the broader context of our organization's strategic frameworks. The success of the project ensures that the project objectives are closely aligned with the strategic goals of the company

(Joslin & Muller, 2016). By defining a solid business case and calculating ROI methodically, project success is critical as it can help ensure that the right thing delivered delivers real value.

Most authors refer to project success in terms of three dimensions (time, cost, and quality), and it is known as the iron triangle (Muller and Judgev, 2012), as shown in the figure below:



**Figure 2-1 : PS Dimensions**

**Source:** (Nixon et al., 2012; Muller and Jugdev, 2012; Zakaria et al., 2015)

**Time:** There are many definitions of the time dimension. It is an important aspect of the construction process for analysis purposes, and the time required to produce a deliverable product is estimated using several techniques. (Stevenson and Starkweather 2010). One method is to define the tasks required to produce the delivered deliverables documented in a work breakdown structure or WBS. Work effort per mission is estimated, and these estimates are aggregated into a final workable estimate (Stevenson and Starkweather 2010). It means the time period in a project process (Lu et al., 2015).

**Cost:** it can be defined as the cost of the project and depends on several variables, including resources, work packages such as labor rates, and minimizing or controlling the influencing factors that create cost variances. The tools used for costing are risk management, cost contingency, cost escalation, and indirect costs. (Yang et al., 2012).

**Quality:** There are many definitions of the quality dimension as it can be defined as the specific requirements to achieve results. The overall definition of quality is what the project must accomplish, and it is a specific description of the outcome that should be achieved or completed. In a large project, quality can significantly impact time and cost (Joslin and Muller, 2016). A key element of the range is the quality of the final product. Time spent on individual tasks determines the overall quality of the project. Some tasks may take some time to fully complete, but they can be completed in a special way with more time. (Joslin and Muller, 2016).

### **2-3 Project Governance (PG)**

There are many differences in how project governance is understood and defined (Bekker and Steyn, 2009; Roe, 2015; Sankaran et al., 2007), often depending on the technical background and field of study of the authors. (Bekker, 2015). As a result, there is generally a lack of consensus on a single definition of project governance (Roe, 2015), as evidenced by the variety of terms used in the literature (Ahola et al., 2014). Müller (2009, p. 4) defines project management as "... a system of values, responsibilities, processes, and policies that enable projects to achieve organizational goals and promote perform it is in the best interest of all stakeholders, internal and external, and of the company itself. Garland (2009, p. 10) defines it simply as "the framework within which project decisions are made."

According to Klakegg et al. (2009), governance covers all aspects of the organization, starting with corporate governance from the board of directors to the top management level is responsible for the implementation and up to the project management level.

Project governance: refers to “Involving a set of relationships between a company's management, its board, its shareholders and other stakeholders [...] and should provide proper incentives for the board and management to pursue objectives that are in the interests of the company and its shareholders and should facilitate effective monitoring OECD (2004)” .

The relationship between governance and administration of projects and their success has recently attracted the attention of researchers. Governance in the project area is often defined as the system of values, structures, processes, and policies that enable projects to achieve organizational goals (Müller, 2016).

Müller et al. (2016b) followed Biesenthal and Wilden (2014) and used corporate and country-level governance concepts that reach the project level. Following Dean (2010) they used: Sovereignty – which refers to supreme power or authority. It is one of the most basic principles in governance and addresses the rights of autonomy, mutual recognition, and control (Krasner, 2001). In the realm of projects, it refers to the right to the autonomy of standalone projects and mutual recognition of projects within the organization, as well as mutual control, for example, through resource sharing (Müller et al., 2016b). This applies similarly to program and portfolio governance. Sovereignty overlaps partly with the concept of project autonomy (e.g., Gemünden et al., 2005). However, the inclusion of mutual recognition and external control widens its scope.

There is a direct relationship between PG and EPS , according to different empirical studies (Abednego and Ogunlana, 2006; APM, 2015; Joslin and Müller, 2016)). However, the mechanisms by which governance project success improvement has not been explored in the literature.

## 2-4 Previous Studies

- **Adnane Belout\*, Clothilde Gauvreau, ( 2004) entitled:**  
**“Factors influencing project success: the impact of human resource management”**

This study aimed to know the impact of human resource management (HRM) on the success of projects in which the researcher distributed a questionnaire to a sample of Canadian organizations from the fields of different, according to a research model that includes nine factors, including human resource management as an interpreted variable and "project success" as a variable. It continues with the project's life cycle, the project's field of activity, and the project's organizational structure as the variables that govern this relationship. The study concludes that all factors (including human resource management) are significantly related to project success. This relationship varies across different lifecycle stages—project and the type of project area and its organizational structure.

- **Dvir, et al., (2006) entitled “Projects and Project Managers: The relationship between project managers’ personality, project types, and project success.”**

This study focuses on the relationship between project type, project manager's personality, and project success. The study used descriptive and analytical methods. The results can be translated into guidance for managers on how to create a better fit between project managers and the projects assigned to them, to ensure more successful projects and results. It seems to suggest that managers have identified project managers who feel overwhelmed by the time and become overly restless with employees who enjoy solving complex problems. People who understand and often think in unique ways, unlike others, are likely to be less productive.

- **Amin Akhavan Tabassi \*, A.H. Abu Bakar,(2008) entitled:**  
**“Training, motivation, and performance: The case of human resource management in construction projects in Mashhad, Iran.”**

This study aimed to determine the impact of training, motivation and performance could play a significant role in increasing the quality of construction projects especially in Mashhad on construction projects , and to achieve the goal of the study , the researcher distributed a set questionnaire were sent to 120 out to groups of respondents and the results showed that the quality of construction projects is strongly correlated with workforce training in HRM practices. Ultimately, it is hoped that this study will help governments, companies, and disaster managers understand the consequences in different parts of Iran of poor construction quality and lack of skilled workers. And cause them to take appropriate measures to prevent possible damage.

- **Lerner, M., Azulay, I., & Tishler, A. (2009) entitled:**  
**“The Role of Compensation Methods in Corporate Entrepreneurship.”**

The results clearly show that entrepreneurs like remuneration to be linked to internal company performance and, in fact, to their performance. At the same time, non-business people prefer payment methods independent of their success. These results emphasize the importance that entrepreneurs attach to the link between internal project performance and commensurate rewards for entrepreneurs to participate. In other words, conditional compensation is a method preferred by entrepreneurs of the organization.

- **Tahir Masood (2010) entitled :**  
**“IMPACT OF HUMAN RESOURCE MANAGEMENT (HRM) PRACTICES ON ORGANIZATIONAL PERFORMANCE: A MEDIATING ROLE OF EMPLOYEE PERFORMANCE”**

This study previewed that organizations with transparent selection systems, well-planned training programs, and employee involvement in decision-making are high



performers. These institutions become attractive to domestic and foreign investors for new investments that contribute to the tremendous growth of economic activities in Pakistan. Since employee performance plays a role in mediating between HRM and SP practices, motivating HRM practices can improve their performance, helping to increase business efficiency.

- **Hwang and Ng (2013) entitled “Project management knowledge and skills for green construction: Overcoming challenges”**

This article researched to identify the challenges faced by project managers undertaking green building projects and identify key areas of knowledge and skills required to meet them. Meet this challenge. The study followed a qualitative approach by reviewing documents and survey methods through interviews with project managers. The results indicate that project managers may face challenges such as higher costs for green construction projects and more risks due to different forms of project delivery.

- **Khan and Farooq ( 2014) entitled:  
“Human resource management practices and project success, a moderating role of Islamic Work Ethics in Pakistani project-based organizations”**

The objective of this study was to know the impact of human resource management practices (selection and appointment of personnel, training, and development, performance evaluation, compensation system) on the success of employees—a project with the presence of “Islamic work ethic” as a modified variable for this relationship. To test the study's hypotheses, the researcher distributed a questionnaire to a sample of project-based organizations in Pakistan that used multiple regression analysis to analyze the data collected. The results also indicate that “work ethic only has a changing effect on the relationship between employee selection and appointment and project success.

- **Yang et al., ( 2015) entitled:**

**“A framework for evaluating relationship among HRM practices, project success, and organizational benefit.”**

This study aims to evaluate the relationship between HRM and PS, and the organizational benefits of project-based companies, according to the research model represented in management practice. Human resource management (engagement, training, and development, human resource planning, job design, performance management, teamwork) as independent variables for project success (as the dependent variable), in addition to including the working environment, working conditions, and project characteristics as a modifier for this relationship. To realize the study's hypotheses, the researcher distributed a questionnaire to a group of Taiwanese companies based on the development of new products to process this data. The results indicate that the positive relationship between human resource management practices and project success depends on the working environment (working hours, free time).

- **Rueda Contreras, Jiménez Almaguer, S.nchez Tovar, ( 2015) entitled:**

**"Perceptions of the impact of training, compensation, and recruitment on project effectiveness."**

The study aimed to verify the impact of human resource management practices on the success of projects. To do this, fundamental component analysis and multiple regression analysis were used to analyze the data collected by distributing questionnaires to a sample of 108 companies based on projects are active in the cities of Tampico and Victoria (Mexico), and most importantly, the study's important conclusion is the presence of a positive impact Human resource management practices “training system and employee compensation” on project performance, while “Staff selection did not have a significant effect on project performance.

- **Huma Sarwar<sup>1</sup>, Junaid Aftab<sup>1</sup>, Haisam Sarwar, Amna Shahid, (2016) entitled: “Role of HRM in Project Success of Project Oriented Organizations in Southern Punjab, Pakistan.”**

The study aimed to determine the role of human resource management practices in the success of the project, and to achieve the objective of the study, the researcher distributed a questionnaire to 270 employees working on the project. Various projects are active in southern Pakistan. Using a set of representative statistical methods mainly in the coefficients of stability, correlation, and multiple regression analysis to process these data, the research results have discovered a significant impact of the selection and appointment of staff in human resource management practices, employee performance evaluation” on project success, when it does not No significant effect of training and Employee development for project success.

- **Manju Patel (2016) entitled :**

**“Impact of governance on project delivery of complex NHS PFI/PPP schemes”**

The study aimed to determine the role of governance on project delivery and the results showed that the organizational and management structure of a project must always have a clear accountability agreement with the single project sponsor responsible for managing the project. that provides clear management responsibilities, simplifies decision-making structures, and speeds up the processes essential to managing project implementation, financial success, and organizational change, which is the underlying problem of the project. It will help.

- **Suhaib Al-Khawaldah (2017) entitled :**

**“The Impact of Project Managers Competencies on Projects success”**

This study showed that the importance of project management skills is average; Experience is most important, followed by skills and lastly, knowledge. The results also

show that the significance of the project's success is, on average, time is most important then quality then cost.

- **Ahmed Ayesh (2019 ) entitled :**

**“The Impact of Projects Team Competencies on Projects Success: Field Study at Jordanian Pharmaceutical Manufacturing Organizations”**

This study concluded that project team members in Jordanian pharmaceutical manufacturing organizations use their skills in knowledge, experience, and skills to achieve project success. Also, project team members in Jordanian pharmaceutical manufacturing organizations use their skillset of knowledge, experience, and skills to ensure project success. in these organizations in an appropriate manner. However, the success of the project in terms of time and cost requires more care, and organizations need more commitment to start the project in the allotted time, on-time delivery, the ability to Project profitability in organizations requires a commitment to provide project financing in accordance with a specific budget and care to deliver the project within the bounds of the estimated cost.

- **Masood Elahi\* and Muhammad Shakil Ahmad,(2020) entitled:**

**“Human resource management practices and project success in hydel projects of Pakistan: moderation of Islamic work ethics and country of origin.”**

This study demonstrated the relationship of selected HRM practices with project success. It examined the moderating role of Islamic work ethics and country of origin after gathering data from 357 respondents working on projects in Pakistan. The results divulged that ETD and ECS had a significant positive relationship with PS out of the selected four HRM practices. It was revealed that organizations that focus on training and development of their employees with periodic training programs and having a

compensation system based on performance, as well as a reward system in place, contributes to the project success in projects of Pakistan.

#### **Arabic Studies:-**

- **Alili Amen, Diab Zaqqay, Swar Yousef (2018), entitled:**  
**“The Impact of Human Resource Management Practices on the Success of the Project- afield Study of a Sample of Projects in the State of “Sidi Bel Abbes.”**

This research aimed to know the impact of human resource management practices on the success of projects, after conducting an analytical questionnaire study for a group of project-based institutions in the state of Sidi Bel Abbes, where it was found that there is a positive and moral impact on the selection and appointment of employees on the success of the project ,as the proper selection of human resources and obtaining competencies according to the needs of the project ensures the formation of an efficient work team that contributes to achieving the objectives of the project in terms of the specified time, the allocated budget, the required quality in addition to customer satisfaction.

## **2-5 What distinguishes this study from previous studies?**

This study distinguished from the other previous studies on variables collected from the above-mentioned studies to examine the impact of human resources management practices with its dimensions (“selection and appointment, “training and development, “and compensation system) on Engineering project’s success in its dimensions (time, cost, quality) in the Jordanian commercial banks. Thus, the present study is considered one of the few studies in the Arab environment, specifically in the Jordanian environment, which dealt with this subject within the limits of the researcher's knowledge.

Moreover, this study will be applied to Jordanian commercial banks, where variables have not been studied before. Besides, the current study will focus on a very important sector, which is Jordanian commercial banks, which have not considered yet in previous studies in Jordan.

## **2-6 Introducing Jordanian commercial banks**

### **Overview (Central Bank of Jordan website, 25th of December 2021).**

The banking and financial sector in the Hashemite Kingdom of Jordan is known by its stability which has maintained its solidity in 2020, despite of the challenges and risks created by the Covid-19 pandemic and its impact on the economic and financial conditions in Jordan. However, the solidity and the stability of this sector is due to the government and the central bank policies that helped to reduce the severity of the consequences of these challenges, this resulted to have a high levels of capital, as well as adequate liquidity and profitability.

Correspondingly, the Jordanian`s banking system has a high capital adequacy ratio, with the percentage ranging between 17 % and 21 % between 2007 and 2020, It is generally higher than the rate set by the Central Bank. Hence, the capital adequacy ratio in 2020 has maintained the same level recorded in 2019 at 18.3%, significantly higher than its level in 2018 of 16.9%.

The banking sector consist of 24 banks operating in Jordan and distributed on three types which are:

- The commercial banks.
- The Islamic banks.
- The foreign banks in Jordan.

As including 15 Jordanian banks: 13 commercial banks and three Islamic banks as well as eight branches of foreign banks. In this study we will be focusing in Jordanian Commercial Banks which consist of (13) Banks. ( see Appendix 2 )

## **Chapter THREE**

### **Study methodology and procedures**

## **Chapter THREE**

### **Study methodology and procedures**

This chapter presents the research methodology in terms of study design, sample, population, reliability, validity, and the procedure and the statistical processes the researcher used in this study.

#### **3-1 Study Design**

This research adopted a descriptive and analytical approach to testing the impact of human resource practices (“selection and appointment,” “training and development,” and Compensation system), with the presence of project governance as moderating variable on Engineering project's success in Jordanian commercial banks.

#### **3-2 Population and Study Sample**

**The study population** consists of the Jordanian commercial banks' sector employees were related to projects sector , which are 13 Jordanian commercial banks. Appendix (2)

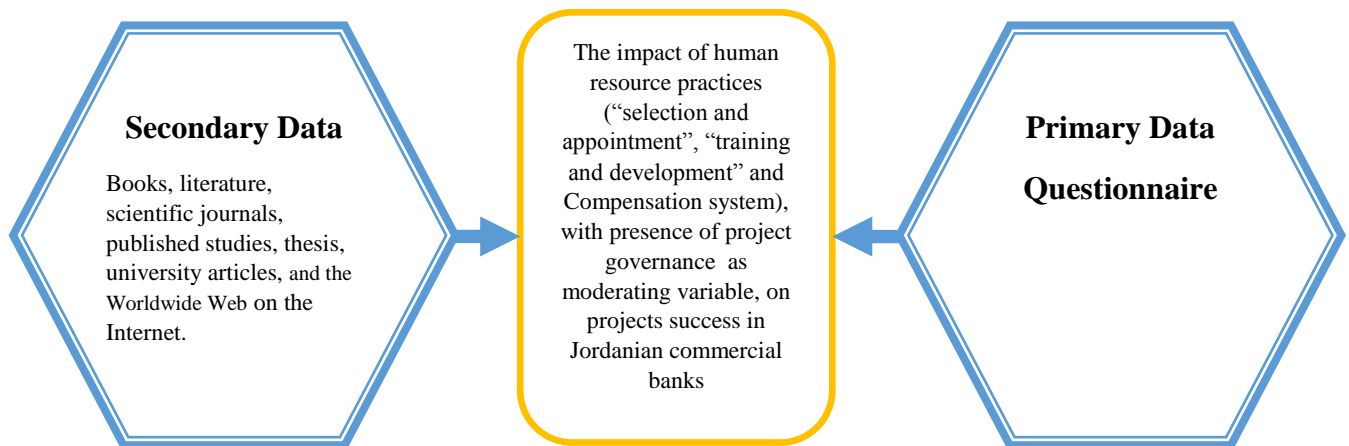
**The study sample:** Due to the large size of the study population, the appropriate convenient sample was relied upon. The researcher depended on the Uma Sekaran table to determine Sample Size. Based on this table, the sample size will be (384). However, the researcher used both (fieldwork and social media) to reach the employees in the banking sector. Thus, after around three months of hard work in questionnaires distribution, we reached more than (400) employees of Jordanian commercial banks. Unfortunately (386) answers were retrieved, and the valid questionnaire for analysis was (379) while the response rate was (97%).



### 3-3 Data Collection Methods

**Secondary Source:** The data used are collected from books, literature, scientific journals, published studies, university articles, electronic sources on the Internet, and various databases to obtain the latest global research on the subject of this study.

**Primary Source:** Data collection is performed specifically for the purpose of this study by creating a questionnaire suitable for the type of study and its title and by extrapolating the scientific aspects of that variable, the previous literature.



**Figure 3.1: Data collection sources**

Source: Prepared by the Researcher

Here are the steps in developing the questionnaire as a tool for collecting data from the sample:

- The researcher depends on previous research to build the measurement of the variables in the questionnaire, which is shown in the table below:

**Table (3-1) Variable's measurements references.**

| <b>Variables</b>               | <b>Measurements Reference</b>                             |
|--------------------------------|---|
| Selection and appointment (SA) | (Tahir Masood,2010)                                       |
| Training and development (TA)  | (Tahir Masood,2010)                                       |
| Compensation sysytem(CS)       | (Tahir Masood,2010)                                       |
| Projects success (PS)          | (Ahmed Ayesh,2019)  |
| Project governance (PG)        | (Farhan Al Fayez,2014) , (Ata, Carlos, Ofer & Imran,2017) |

### **3-4 Research Instrument**

The questionnaire consisted of the following parts: as shown in appendix (3)

- Part one: Demographics and sample characteristics questions. It is represented by (job title, workplace, Educational qualification, Experience, gender, age, and Monthly income).
- Part two: Independent variables questions (Selection and appointment, training and development, and Compensation system).
- Part three: Dependent variable questions (Engineering projects success in Jordanian commercial banks).
- Part four: Moderating variable questions (Project governance).

The researcher interviewed a panel of reviewers from employees of Jordanian commercial banks with various levels of job titles, some of the interviews were held in offices and some were by phone calls and discussed the topic of the study.

Note that the number of questions for every part was chosen depending on procedural definitions and construct validity .

### **3-5 Statistical Methods**

The researcher coded all gathered data and processed it to analyze the study data and test its hypotheses; the SPSS Ver26 software was used to conduct descriptive and inferential analysis by using statistical methods. Consequently, the (0.05) significance level has been used in examining hypotheses. As shown in Table (3-2).

**Table (3-2). The statistical methods used**

|   |                |        |         |          |                   |
|---|----------------|--------|---------|----------|-------------------|
| Descriptive statistics:   |                |        |         |          |                   |
| Frequencies and Percentages: To measure the distributions of the characteristics of the sample members  |                |        |         |          |                   |
| Arithmetic mean: to measure the average answers of the sample members on the items of the study questionnaire   |                |        |         |          |                   |
| Five-point Likert scale   |                |        |         |          |                   |
| Degree  | Strongly Agree | Agree  | Neutral | Disagree | Strongly Disagree |
| Approval  | 5              | 4      | 3       | 2        | 1                 |
| Relative weight   | 81-100%        | 61-80% | 41-60%  | 21-40%   | 1-20%             |
| Length of the period=   |                |        |         |          |                   |
| upper - lower   |                | =      | 5- 1    |          | =1.33             |
| The number of levels  |                |        | 3       |          |                   |
| Levels number to be :   |                |        |         |          |                   |
| Ranged  |                | Degree |         |          |                   |
| 1 –2.33   |                | Low    |         |          |                   |
| 2.34 – 3.67   |                | Medium |         |          |                   |
| 3.68 – 5  |                | High   |         |          |                   |
| Standard deviation: to measure the dispersion of the answers of the sample members from their arithmetic mean   |                |        |         |          |                   |
| Inferential statistics:   |                |        |         |          |                   |
| Skewness and Kurtosis to test normal distribution of the data.  |                |        |         |          |                   |
| Person Correlation test to test the correlation coefficients of the independent variables and the validity of the construct to show the extent to which the degree of each item is correlated with the total score of its axis, and to determine the ability of each item of the scale to be distinguished. |                |        |         |          |                   |
| Multiple linear regression test to test the effect of independent variables on the dependent variable, and simple regression analysis to test the effect of each independent variable on the dependent variable.  |                |        |         |          |                   |
| VIF test to test the non-interference of independent variables and to test the power of building the study model  |                |        |         |          |                   |
| Consistency coefficient (Cronbach Alpha) to test the stability of the study instrument  |                |        |         |          |                   |
| Exploratory factor analysis of the asymptotic structural validity test  |                |        |         |          |                   |
| Hierarchical integration regression   |                |        |         |          |                   |

But, to achieve the research goals.

The following table shows the distribution of the study sample according to their demographic variables.

**Table (3-3). Distribution of the study sample according to their personal and occupational variables**

| <b>Variable</b>  | <b>Category</b>                     | <b>Frequency</b> | <b>Percent</b> |
|--|-------------------------------------|------------------|----------------|
| <b>Gender</b>  | Female                              | 168              | 44.3           |
|  | Male                                | 211              | 55.7           |
|  | <b>Total</b>                        | <b>379</b>       | <b>100</b>     |
| <b>Educational qualification</b>   | BCSA                                | 149              | 39.3           |
|  | Diploma                             | 13               | 3.4            |
|  | High diploma                        | 77               | 20.3           |
|  | Master                              | 79               | 20.8           |
|  | PHD                                 | 61               | 16.1           |
|  | <b>Total</b>                        | <b>379</b>       | <b>100</b>     |
| <b>Age (years)</b>   | 22 - less than 30                   | 65               | 17.2           |
|  | 30 - less than 38                   | 153              | 40.4           |
|  | 38 -Less than 46                    | 119              | 31.4           |
|  | 46 and above                        | 42               | 11.1           |
|  | <b>Total</b>                        | <b>379</b>       | <b>100</b>     |
| <b>Monthly income (JD)</b>   | 1000 - <1500                        | 121              | 31.9           |
|  | 1500 - <2000                        | 103              | 27.2           |
|  | 500 - <1000                         | 91               | 24.0           |
|  | Less than 500                       | 22               | 5.8            |
|  | more than 2000                      | 42               | 11.1           |
|  | <b>Total</b>                        | <b>379</b>       | <b>100</b>     |
| <b>Years of Experience</b>   | 10 - less than 15                   | 140              | 36.9           |
|  | 15 and above                        | 44               | 11.6           |
|  | 5 - less than 10                    | 149              | 39.3           |
|  | Less than 5                         | 46               | 12.1           |
|  | <b>Total</b>                        | <b>379</b>       | <b>100</b>     |
| <b>Bank</b>  | Amman Cairo Bank                    | 27               | 7.1            |
|  | Arab Bank                           | 42               | 11.1           |
|  | Arab Banking Corporation            | 15               | 4.0            |
|  | Arab Jordan Investment Bank         | 28               | 7.4            |
|  | Bank al Etihad                      | 28               | 7.4            |
|  | Bank of Jordan                      | 21               | 5.5            |
|  | Capital Bank of Jordan              | 40               | 10.6           |
|  | Housing Bank                        | 41               | 10.8           |
|  | Invest Bank                         | 26               | 6.9            |
|  | Jordan Ahli Bank                    | 44               | 11.6           |
|  | Jordan Commercial Bank              | 22               | 5.8            |
|  | Jordan Kuwait bank                  | 25               | 6.6            |
|  | Societe Generale de Banque /Jodanie | 20               | 5.3            |
|  | <b>Total</b>                        | <b>379</b>       | <b>100</b>     |
| <b>Job title</b>   | Engineer                            | 109              | 28.8           |
|  | Head of Section / Center            | 43               | 11.3           |
|  | Human resource officer              | 59               | 15.6           |
|  | Senior Engineer                     | 92               | 24.3           |
|  | Supervisor                          | 76               | 20.1           |
|  | <b>Total</b>                        | <b>379</b>       | <b>100</b>     |
| <b>Number of Projects you Participated in during Years of Experience</b> | 11-20 Projects                      | 183              | 48.3           |
|  | Less than 10 Projects               | 130              | 34.3           |
|  | More than 20 projects               | 66               | 17.4           |
|  | <b>Total</b>                        | <b>379</b>       | <b>100</b>     |

The results shown in the above table showed the following:

- The percentage of (55.7%) of the study sample members are males, while the percentage of females is (44.3%). The reason may be that the percentage of males is close to the percentage of females because the nature of the job in banks does not depend on one gender more than the other.
- (39.3%) of the study sample hold a bachelor's degree, (20.8%) have a master's degree, (20.3%) hold a higher diploma, (16.1%) hold a doctorate, and (3.4%) hold a diploma which indicates that most of Jordanian commercial banks employees have high scientific degrees which enhance the importance of this study.
- A percentage of (17.2%) of the study sample members are between (22-less than 30) years old, and (40.4%) are between (30- less than 38) years old, and (31.4%) aged between (38-less than 46), and the percentage of those over 46 years old (11.1%).
- (31.9%) of the study sample of individuals whose monthly income ranges between (1000- less than 1500 JD), and (27.2%) between (1500- less than 2000 JD), and (24%) between (500- less than 1000 JD), (11.1%) (More than 2000 JD), and (5.8%) their monthly income is less than (500 JD). This indicates that there is an effective system for compensation in banks
- A percentage (39.3%) of their experience ranges between (5-less than 10) years, (36.9%) between (10-less than 15) years, and (12.1%) have less than 5 years of experience, and (11.6%) their experience more than 15 years.
- Percentage of (28.8%) of the study sample members are engineers, and (24.3%) senior engineers, (20.1%) supervisors, (15.6%) human resource officers, (and 11.3%) head of section/center.

- The largest percentage of the study sample has reached the number of projects in which they participated during their years of experience between (11-20 projects) with a percentage (of 48.3%) and (34.3%) (less than ten projects), (17.4%) more than 20 projects.

#### **Face validity :**

The researcher conducted (pilot study) with professional academic staff from reputable universities in Jordan, and they delivered scientific recommendations that supported the research instrument. Appendix 1

#### **Construct validity:**

To ensure the structural validity of the study tool, Pearson Correlation coefficients were found between each paragraph and the total score for its axis in order to determine the ability of each paragraph of the scale to be distinguished. Items whose correlation coefficient is less than (0.25) are considered low and should be deleted ( Linn & Gronlund, 2012), and the following tables show this:

**Table (3-4). Correlation coefficients between each of the paragraphs of the dimensions of the independent variable and the total degree of its axis**

| <b>Dimensions of the independent variable: HRM practices</b> |                                |                                      |                                |                                 |                                |
|--|--------------------------------|--------------------------------------|--------------------------------|---------------------------------|--------------------------------|
| <b>Selection and appointment (SA)</b>                        |                                | <b>Training and Development (TD)</b> |                                | <b>Compensation system (CS)</b> |                                |
| <b>Paragraph</b>   | <b>Correlation coefficient</b> | <b>Paragraph</b>                     | <b>Correlation coefficient</b> | <b>Paragraph</b>                | <b>Correlation coefficient</b> |
| 1  | .699**                         | 7                                    | .699**                         | 14                              | .711**                         |
| 2  | .744**                         | 8                                    | .628**                         | 15                              | .750**                         |
| 3  | .743**                         | 9                                    | .676**                         | 16                              | .737**                         |
| 4  | .695**                         | 10                                   | .728**                         | 17                              | .737**                         |
| 5  | .691**                         | 11                                   | .719**                         | 18                              | .745**                         |
| 6  | .711**                         | 12                                   | .725**                         | 19                              | .750**                         |
| -  | .523**                         | 13                                   | .687**                         | 20                              | .651**                         |
| **. Correlation is significant at the 0.01 level (2-tailed). |                                |                                      |                                |                                 |                                |

It is clear from the data shown in the above table that the coefficients for distinguishing paragraphs for "HRM practices" ranged between (0.523-0.750), which are significant values at the level ( $\alpha \leq 0.01$ ), which mean that the paragraphs have a high distinction and greater than (0.25), and this indicates the paragraphs of the independent study variable are true to what they were designed to measure.

**Table (3-5). Correlation coefficients between each of the paragraphs of the dimensions of the dependent variable and the total score for its axis**

| <b>Dimensions of the dependent variable: E.Project success</b> |                                |                  |                                |                  |                                |
|--|--------------------------------|------------------|--------------------------------|------------------|--------------------------------|
| <b>Duration</b>  |                                | <b>Cost</b>      |                                | <b>Quality</b>   |                                |
| <b>Paragraph</b>   | <b>Correlation coefficient</b> | <b>Paragraph</b> | <b>Correlation coefficient</b> | <b>Paragraph</b> | <b>Correlation coefficient</b> |
| 21   | .801**                         | 24               | .730**                         | 30               | .727**                         |
| 22   | .820**                         | 25               | .737**                         | 31               | .801**                         |
| 23   | .764**                         | 26               | .757**                         | 23               | .779**                         |
|  |                                | 27               | .742**                         | 33               | .758**                         |
|  |                                | 28               | .728**                         | 34               | .742**                         |
|  |                                | 29               | .698**                         |                  |                                |
| **. Correlation is significant at the 0.01 level (2-tailed).   |                                |                  |                                |                  |                                |

It is clear from the data shown in the above table that the coefficients for distinguishing paragraphs for "E.Project success" ranged between (0.698-0.820), which are significant values at the level ( $\alpha \leq 0.01$ ), which means that the paragraphs have a high distinction and greater than (0.25), and this indicates the paragraphs of the dependent study variable are true to what they were designed to measure.

**Table (3-6). Correlation coefficients between each of the paragraphs of the moderated variable and the total score**

| Moderate variable: Project Governance                        |                         |           |                         |
|--|-------------------------|-----------|-------------------------|
| Paragraph  | Correlation coefficient | Paragraph | Correlation coefficient |
| 35   | .582**                  | 43        | .620**                  |
| 36   | .621**                  | 44        | .692**                  |
| 37   | .616**                  | 45        | .655**                  |
| 38   | .583**                  | 46        | .658**                  |
| 39   | .622**                  | 47        | .636**                  |
| 40   | .650**                  | 48        | .671**                  |
| 41   | .698**                  | 49        | .664**                  |
| 42   | .627**                  | 50        | .603**                  |
| **. Correlation is significant at the 0.01 level (2-tailed). |                         |           |                         |

It is clear from the data shown in the above table that the coefficients for distinguishing paragraphs for "Project governance" ranged between (0.583-0.692), which are significant values at the level ( $\alpha \leq 0.01$ ), which means that the paragraphs have a high distinction and greater than (0.25), and this indicates the paragraphs of the moderated study variable are true to what they were designed to measure.

#### **Convergent structural validity using exploratory factor analysis:**

To ensure the convergent structural validity of the study variables, the exploratory general analysis test was used, and the following tables show that

#### **Firstly: Convergent structural validity, exploratory factor analysis of the independent variable (HRM practices):**

**Table (3-7). Saturation (loading) values of factors that represent the independent variable through orthogonal rotation of the axes (Varimax)**

| # | Paragraph  | Saturation values on the extracted factors |                               |                          |
|---|--|--|-------------------------------|--------------------------|
|   |  | Selection and appointment (SA)             | Training and Development (TD) | Compensation system (CS) |
| 1 | The bank (Recruitment & selection) system followed is well defined.    | .550                                       |                               |                          |
| 2 | The bank uses Standardized tests in the selection process of employees | .685                                       |                               |                          |



| #                                   | Paragraph  | Saturation values on the extracted factors |                               |                          |
|-------------------------------------|--|--|-------------------------------|--------------------------|
|                                     |  | Selection and appointment (SA)             | Training and Development (TD) | Compensation system (CS) |
| 3                                   | The bank uses comprehensive selection process before rendering a decision                      | .652                                       |                               |                          |
| 4                                   | The bank uses unbiased test and interviewing techniques for selection                          | .619                                       |                               |                          |
| 5                                   | The bank has strong merit criteria for candidates selection.                                   | .656                                       |                               |                          |
| 6                                   | The bank uses attitude and desire to work in a team and individual as a criterion in selection | .645                                       |                               |                          |
| 7                                   | The Bank implements training and development programs based on the performance gap             |  | .628                          |                          |
| 8                                   | The Bank conducts annual specialized training programs for each job                            |  | .565                          |                          |
| 9                                   | The Bank holds orientation training programs for new employees to acquire work skills          |  | .591                          |                          |
| 10                                  | The Bank evaluates the effectiveness of training programs using scientific evaluation methods. |  | .653                          |                          |
| 11                                  | T&D has helped reduce employee turnover in the bank  |  | .686                          |                          |
| 12                                  | T&D has resulted in higher employee performance in the bank                                    |  | .671                          |                          |
| 13                                  | T&D has resulted in higher financial returns for the bank                                      |  | .655                          |                          |
| 14                                  | Compensation offered by the bank matches the expectancy of employees.                          |  |                               | .500                     |
| 15                                  | The bank determines salaries on the basis of market competitiveness                            |  |                               | .597                     |
| 16                                  | The bank determines compensation based on the employee's competence                            |  |                               | .738                     |
| 17                                  | The compensation for all employees is directly linked to their performance.                    |  |                               | .749                     |
| 18                                  | The bank offers both financial and non-financial rewards without discrimination                |  |                               | .671                     |
| 19                                  | My last year's salary raise was better than the previous one.                                  |  |                               | .546                     |
| 20                                  | In general, I understand why I get what I get  |  |                               | .524                     |
| KMO                                 |  | 0.938                                      |                               |                          |
| Eigen value                         |  | 8.294                                      | 1.195                         | 1.085                    |
| Explained variance ratio            |  | 41.47                                      | 5.97                          | 5.43                     |
| Cumulative Explained Variance Ratio |  | 52.871                                     |                               |                          |

The results of the exploratory factor analysis appearing in the above table showed that the KMO division amounted to (0.938), and according to the rule (Kaiser, 1979), which indicates that the minimum acceptable test value is (0.5), it turns out that the resulting value is greater than 0.5. Thus, the sample size is sufficient and appropriate for

the study and the exploratory factor analysis application. The researcher noted from the data shown in the above table that the Eigen value is greater than the correct one.

The results shown in the table above showed the values of the explained variance ratios for each factor that was extracted; the lowest explanatory variance value was (5.43), and the total explanatory ratios amounted to (52.871%) of the total variance of the independent variable.

The results shown in the above table also show the loading values (saturation) for each of the paragraphs of each of the extracted factors. It was found that the lowest value was (0.500). This value is greater than (0.40), so it is considered sufficient and appropriate and expresses acceptable and sufficient saturation values for the paragraphs. Every factor is extracted.

**Secondly: Convergent structural validity, exploratory factor analysis of the dependent variable (E.Project success):**

**Table (3-8). Saturation (loading) values of factors that represent the dependent variable through orthogonal rotation of the axes (Varimax)**

| #  | Paragraph   | Saturation values on the extracted factors |      |         |
|----|---|--|------|---------|
|    |   | Duration                                   | Cost | Quality |
| 21 | The project management adhered to most of the scheduled points        | .632                                       |      |         |
| 22 | Project critical activities are completed within the specified time   | .672                                       |      |         |
| 23 | The project is completely implemented on time                         | .660                                       |      |         |
| 24 | The bank provides project resources according to the project schedule |  | .697 |         |
| 25 | There were no major with- cost change requests during the project .   |  | .659 |         |
| 26 | An appropriate budget is developed for the project                    |  | .698 |         |
| 27 | The Project budget is managed appropriately                           |  | .642 |         |
| 28 | Project costs are reduced without affecting the quality               |  | .684 |         |

|                                     |  |        |       |       |
|-------------------------------------|--|--------|-------|-------|
| 29                                  | The Project has completed according to the budget allocated                                      |        | .674  |       |
| 30                                  | The project achieves its objectives as agreed  |        |       | .669  |
| 31                                  | The project is delivered completely in accordance with the quality standards for the banks       |        |       | .729  |
| 32                                  | Project outputs achieve client requirements  |        |       | .705  |
| 33                                  | The commitment by the quality standards for banks reduces errors in the project                  |        |       | .677  |
| 34                                  | The adherence of the quality standards for banks enhances the efficiency of project team members |        |       | .676  |
| KMO                                 |  | 0.922  |       |       |
| Eigen value                         |  | 6.42   | 1.985 | 1.898 |
| Explained variance ratio            |  | 45.86  | 7.03  | 6.41  |
| Cumulative Explained Variance Ratio |  | 59.305 |       |       |

The results of the exploratory factor analysis appearing in the above table showed that the KMO division amounted to (0.922), and according to the rule (Kaiser, 1979), which indicates that the minimum acceptable test value is (0.5), it turns out that the resulting value is greater than 0.5. Thus, the sample size is sufficient and appropriate for the study and for the application of the exploratory factor analysis, and the researcher noted from the data shown in the above table that the Eigen value is greater than the correct one.

The results shown in the table above showed the values of the explained variance ratios for each factor that was extracted, and the lowest explanatory variance value was (6.41). The total explanatory ratios amounted to (59.305%) of the total variance of the dependent variable.

The results are shown in the above table also show the loading values (saturation) for each of the paragraphs of each of the extracted factors. It was found that the lowest value was (0.632). This value is greater than (0.40), so it is considered sufficient and

appropriate and expresses acceptable and sufficient saturation values for the paragraphs.

Every factor is extracted.

**Thirdly: Convergent structural validity, exploratory factor analysis of the moderated variable (Project governance):**

**Table (3-9). Saturation (loading) values of factors that represent the moderated variable through orthogonal rotation of the axes (Varimax)**

| #   | Paragraph   | Saturation values on the extracted factors |
|-----|---|--|
| 35  | The management board had overall responsibility for project governance  | .550                                       |
| 36  | Disciplined governance arrangements were applied throughout the project life cycle  | .597                                       |
| 37  | Roles and responsibilities for project governance were defined clearly  | .606                                       |
| 38  | The project's business case was supported by relevant and realistic information that provided a reliable basis for making authorization decisions | .576                                       |
| 39  | There were clearly defined criteria for reporting project status and for the escalation of risks and issues to the relevant organizational levels | .622                                       |
| 40  | Decisions made at authorization points were recorded and communicated to the relevant stakeholders  | .655                                       |
| 41  | The project had a project owner who was the single point of accountability in and to the bank for realizing project outcomes and benefits         | .706                                       |
| 42  | The project had a project manager who was accountable to the project owner for achieving project objectives and deliverables                      | .628                                       |
| 43  | The bank fostered a culture of frank internal disclosure of project management information  | .624                                       |
| 44  | Board members take the leading role in monitoring managements actions and decisions   | .698                                       |
| 45  | The Bank prepares guidelines that show employees procedures for implementing business.  | .667                                       |
| 46  | The board of Directors gives advice and offers suggestions to the management staff on issues related to the project affairs                       | .673                                       |
| 47  | The board of directors is keen on reviewing how the project resources are being used by the various departments                                   | .646                                       |
| 48  | The Bank adopts flexible administrative accountability mechanisms   | .681                                       |
| 49  | The Bank operates according to administrative accountability mechanisms declared to all employees.  | .670                                       |
| 50  | Board members of the bank have the combination of skills, (fundraising, management, legal, financial, marketing etc) necessary to do their work   | .602                                       |
| KMO |   | 0.909                                      |

| # | Paragraph                           | Saturation values on the extracted factors |
|---|-------------------------------------|--|
|   | Eigen value                         | 6.531                                      |
|   | Explained variance ratio            | 40.818                                     |
|   | Cumulative Explained Variance Ratio | 40.818                                     |

The results of the exploratory factor analysis appearing in the above table showed that the KMO division amounted to (0.909). According to the rule (Kaiser, 1979), which indicates that the minimum acceptable test value is (0.5), it turns out that the resulting value is greater than 0.5; thus, the sample size is sufficient and appropriate for the study and the application of the exploratory factor analysis, and researcher noted from the data shown in the above table that the Eigen value is greater than the correct one.

The results shown in the table above showed the values of the explained variance ratios for each, and the total explanatory ratios amounted to (40.818%) of the total variance of the independent variable.

The results are shown in the above table also show the loading values (saturation) for each of the paragraphs of each of the extracted factors, and it was found that the lowest value was (0.550), and this value is greater than (0.40), so it is considered sufficient and appropriate and expresses acceptable and sufficient saturation values for the paragraphs factor is extracted.

### 3-6 Reliability of Study Tool

Cronbach's Alpha coefficients were found to ensure the stability of the study tool, and the results were as in the following table:

**Table (3-10). Cronbach's Alpha coefficients for testing the stability of the study tool**

| Study variables      |                                | Cronbach Alpha Coefficients | # of paragraphs |
|----------------------|--------------------------------|-----------------------------|-----------------|
| Independent variable | Selection and appointment (SA) | 0.82                        | 6               |
|                      | Training and Development (TD)  | 0.84                        | 7               |
|                      | Compensation system (CS)       | 0.91                        | 7               |
|                      | HRM practices                  | <b>0.90</b>                 | <b>20</b>       |
| Dependent variable   | Duration                       | 0.80                        | 3               |
|                      | Cost                           | 0.87                        | 6               |
|                      | Quality                        | 0.89                        | 5               |
|                      | (E.Projects success )          | <b>0.88</b>                 | <b>14</b>       |
| Moderated variable   | Project Governance             | <b>0.91</b>                 | <b>16</b>       |

Through the values of Cronbach's alpha coefficients shown in the above table, which range between (0.80-0.91), the researcher noted that all of them are more than (0.6), which indicates the stability of the study tool (Sekaran & Bougie, 2016).

#### **Normal distribution test:**

Skewness and Kurtosis coefficients were extracted to test the normal distribution of the study data, where if the Skewness and Kurtosis coefficient values were less than (1), then the data is normally distributed (Doane & Seward, 2015). The following table shows that:

**Table (3-11). Normal distribution of the data based on the skewness and Kurtosis coefficients**

|  | <b>Mean</b>   | <b>Std. Deviation</b> | <b>Kurtosis</b> | <b>Skewness</b> |
|--|---------------|-----------------------|-----------------|-----------------|
| Selection and appointment (SA)         | 3.9749        | .59270                | 0.642           | -0.043          |
| Training and Development (TD)          | 4.0064        | .57895                | 0.976           | -0.027          |
| Compensation system (CS)               | 4.0170        | .60510                | 0.800           | -0.118          |
| <b>HRM practices (overall)</b>         | <b>3.9994</b> | <b>-</b>              | <b>0.284</b>    | <b>-0.224</b>   |
| Duration                               | 3.9683        | .67599                | 0.294           | -0.850          |
| Cost                                   | 4.0158        | .61247                | 0.647           | -0.258          |
| Quality                                | 4.0876        | .59480                | 0.276           | -0.136          |
| <b>(E.Projects success ) (overall)</b> | <b>4.0239</b> | <b>-</b>              | <b>0.972</b>    | <b>-0.239</b>   |
| <b>Project Governance</b>              | <b>4.0663</b> | <b>-</b>              | <b>0.891</b>    | <b>-0.816</b>   |

Through the results shown in the above table, the researcher noted that all the values of the skewness and Kurtosis coefficient are less than 1, which indicates that the data are distributed normally and according to the central limit theorem, which shows that if we choose all the possible samples from a particular population, and we calculate the arithmetic mean for each sample, We will note that all the arithmetic means of the samples are distributed close to the normal distribution, even if the distribution of the original population is not close to the normal distribution, provided that the number of observations in each sample exceeds 30 observations (Fidell, Tabachnick, 2018).

#### **The suitability of the study model to statistical methods:**

To perform the multiple regression analysis tests requires that the independent variables are highly correlated with the dependent variable, and at the same time that they are not strongly correlated with each other because if they are strongly correlated with each other, this reduces the value of (R) because the independent variables share a

variance The dependent variable itself, in addition to the difficulty in determining the relative importance of each independent variable (Dudin, 2018), and in order to verify this, the Multiple Linear Correlation Test (Multicollinearity) were conducted.

Before using this method, it was ascertained that there was no high correlation between the independent variables (Multicollinearity) in addition to the fact that the data fulfilled the condition of the normal distribution, and Table (3-12) indicates that the Tolerance coefficient of the independent variables was less than 1 and greater than 0.1, and the values of the variance inflation factor (VIF) are less than 5, which is an indication that there is no high correlation between the independent variables (Hair et al., 2018).

**Table (3-12). The results of the test of the strength of the correlation between the independent variables**

|                                | <b>Tolerance</b> | <b>VIF</b> |
|--------------------------------|------------------|------------|
| Selection and appointment (SA) | .393             | 2.547      |
| Training and Development (TD)  | .355             | 2.820      |
| Compensation system (CS)       | .419             | 2.387      |

In order to further confirm the previous result, Pearson correlation coefficients were found between the dimensions of the independent variable to make sure that there was no high multiple linear correlation between the independent variables, and the results in the following table show that:



**Table (3-13). Pearson correlation for independent variables**

|  | <b>Selection and<br/>appointment<br/>(SA)</b> | <b>Training and<br/>Development<br/>(TD)</b> | <b>Compensation<br/>system (CS)</b> |
|--|---|--|-------------------------------------|
| Selection and appointment (SA)                               | 1   |  |                                     |
| Training and Development (TD)                                | .749**  | 1  |                                     |
| Compensation system (CS)                                     | .694**  | .729**                                       | 1                                   |
| **. Correlation is significant at the 0.01 level (2-tailed). |   |  |                                     |

Through the values of Pearson's correlation coefficients in the above table, researcher noted that the highest correlation was (0.749) between the variables of the Selection and appointment (SA) and the Training and Development (TD), and this indicates the absence of the phenomenon of high multiple linear correlation between the independent variables, because it is less than 80%, which indicates that The sample is free from the problem of high multiple linear correlation (Gujarati, 2017).

## Chapter Four

### Data analysis results and hypothesis testing

#### 4-1 Introduction

This chapter includes a presentation of the results of the statistical analysis of the answers and estimates of the study sample about the independent, dependent and mediator variables of the study with their dimensions by finding the means, standard deviations and degrees of estimation, and testing the study hypotheses using simple and multiple linear regression analysis and path analysis test.

#### 4-2 Describe the independent, dependent, and moderator variables of the study:

##### 4-2-1 Description of the independent variable (HRM practices):

Table (4-1) shows the means and standard deviations of the responses of the study sample towards the dimensions of the independent variable "HRM practices":

**Table (4-1). Means, standard deviations, and the degrees of the dimensions of "HRM practices"**

| Rank          | # | Variable                       | Mean | Std. Deviation | %    | Degree |
|---------------|---|--------------------------------|------|----------------|------|--------|
| 3             | 1 | Selection and appointment (SA) | 3.97 | .593           | 79.5 | High   |
| 2             | 2 | Training and Development (TD)  | 4.01 | .579           | 80.1 | High   |
| 1             | 3 | Compensation system (CS)       | 4.02 | .605           | 80.3 | High   |
| HRM practices |   |                                | 4.00 | -              | 80.0 | High   |

It is clear from the results shown in the above table that the means expressing the dimensions of the independent variable (HRM practices) ranged between (3.97-4.02), and the dimension "Compensation system (CS)" got the highest with the high degree, and dimension "Selection and appointment (SA)" got the lowest with a high degree

also, and the general index of HRM practices reached (4.00) by (80.0%), which indicates that the degree HRM practices in Jordanian commercial banks came to a high degree. The following is a breakdown of the dimensions of the independent variable:

### 1) Selection and appointment (SA):

Table (4-2) shows the means, standard deviations, and the order of the respondents' answers towards the dimension of the "Selection and appointment (SA)", which was measured based on six items.

**Table (4-2). Means and standard deviations of the answers of the study sample members towards the "Selection and appointment (SA)"**

| Rank                           | # | Variable   | Mean | Std. Deviation | %    | Degree |
|--------------------------------|---|--|------|----------------|------|--------|
| 5                              | 1 | The bank (Recruitment & selection) system followed is well defined.                                | 3.84 | .890           | 76.8 | High   |
| 1                              | 2 | The bank uses Standardized tests in the selection process of employees                             | 4.07 | .760           | 81.4 | High   |
| 2                              | 3 | The bank uses a comprehensive selection process before rendering a decision                        | 4.01 | .821           | 80.3 | High   |
| 4                              | 4 | The bank uses unbiased tests and interviewing techniques for the selection                         | 3.97 | .840           | 79.3 | High   |
| 4                              | 5 | The bank has strong merit criteria for candidate selection.  | 3.97 | .806           | 79.5 | High   |
| 3                              | 6 | The bank uses attitude and desire to work in a team and individual as a criterion in the selection | 3.99 | .870           | 79.8 | High   |
| Selection and appointment (SA) |   |  | 3.97 | -              | 79.5 | High   |

The results shown in the above table indicate that the general indicator for the dimension of the "Selection and appointment (SA)" has reached (3.97) of the total scale area, which indicates a high level of the Selection and appointment (SA) in Jordanian commercial banks from the respondents' point of view. It is also noted that paragraph No. (2), " The bank uses Standardized tests in the selection process of employees," got the highest estimates with a high mean of (4.07) and a standard deviation of (0.760), and Paragraph No. (1) " The bank (Recruitment & selection) system followed is well

defined" got the lowest estimates with a mean of (3.84), which is an average with a high degree and a standard deviation of (0.890).

## 2) Training and Development (TD):

Table (4-3) shows the means, standard deviations, and the order of the respondents' answers towards the dimension of the "Training and Development (TD)", which was measured based on seven items.

**Table (4-3). Means and standard deviations of the answers of the study sample members towards the "Training and Development (TD)"**

| Rank                          | #  | Variable   | Mean | Std. Deviation | %    | Degree |
|-------------------------------|----|--|------|----------------|------|--------|
| 5                             | 7  | The Bank implements training and development programs based on the performance gap             | 4.00 | .853           | 80.1 | High   |
| 5                             | 8  | The Bank conducts annual specialized training programs for each job                            | 4.00 | .847           | 80.1 | High   |
| 2                             | 9  | The Bank holds orientation training programs for new employees to acquire work skills          | 4.03 | .816           | 80.6 | High   |
| 1                             | 10 | The Bank evaluates the effectiveness of training programs using scientific evaluation methods. | 4.05 | .802           | 80.9 | High   |
| 6                             | 11 | T&D has helped reduce employee turnover in the bank  | 3.93 | .866           | 78.7 | High   |
| 4                             | 12 | T&D has resulted in higher employee performance in the bank                                    | 4.01 | .844           | 80.2 | High   |
| 3                             | 13 | T&D has resulted in higher financial returns for the bank                                      | 4.02 | .808           | 80.4 | High   |
| Training and Development (TD) |    |  | 4.01 | -              | 80.1 | High   |

The results shown in the above table indicate that the general indicator for the dimension of the "Training and Development (TD)" has reached (4.01) of the total scale area, which indicates a high level of the Training and Development (TD) in Jordanian commercial banks from the respondents' point of view. It is also noted that paragraph No. (10), "The Bank evaluates the effectiveness of training programs using scientific evaluation methods," got the highest estimates with a high mean of (4.05) and a

standard deviation of (0.802). Paragraph No. (11) "T&D has helped reduce employee turnover in the bank" got the lowest estimates with a mean of (3.93), which is an average with a high degree and a standard deviation of (0.866).

### 3) Compensation system (CS):

Table (4-4) shows the means, standard deviations, and the order of the respondents' answers towards the dimension of the "Compensation system (CS)," which was measured based on seven items.

**Table (4-4). Means and standard deviations of the answers of the study sample members towards the "Compensation system (CS)"**

| Rank                     | #  | Variable  | Mean | Std. Deviation | %    | Degree |
|--------------------------|----|---|------|----------------|------|--------|
| 1                        | 14 | Compensation offered by the bank matches the expectancy of employees.           | 4.08 | .822           | 81.6 | High   |
| 4                        | 15 | The bank determines salaries on the basis of market competitiveness             | 4.01 | .856           | 80.3 | High   |
| 4                        | 16 | The bank determines compensation based on the employee's competence             | 4.01 | .793           | 80.1 | High   |
| 3                        | 17 | The compensation for all employees is directly linked to their performance.     | 4.04 | .815           | 80.8 | High   |
| 5                        | 18 | The bank offers both financial and non-financial rewards without discrimination | 3.97 | .892           | 79.3 | High   |
| 6                        | 19 | My last year's salary raise was better than the previous one.                   | 3.96 | .852           | 79.2 | High   |
| 2                        | 20 | In general, I understand why I get what I get                                   | 4.05 | .798           | 81.1 | High   |
| Compensation system (CS) |    |   | 4.02 | -              | 80.3 | High   |

The results shown in the above table indicate that the general indicator for the dimension of the "Compensation system (CS)" has reached (4.02) of the total scale area, which indicates a high level of Compensation system (CS) in Jordanian commercial banks from the respondents' point of view. It is also noted that paragraph No. (14) "Compensation offered by the bank matches the expectancy of employees," got the highest estimates with a high mean of (4.08) and a standard deviation of (0.822), and

Paragraph No. (19) "My last year's salary raise was better than the previous one" got the lowest estimates with a mean of (3.96), which is an average with a high degree and a standard deviation of (0.852).

#### 4-2-2 Description of the dependent variable (E.Project success):

Table (4-5) shows the means and standard deviations of the responses of the study sample towards the dimensions of the dependent variable "E.Project success ":

**Table (4-5). Means, standard deviations, and the degree of the dimensions of "Project success."**

| Rank                  | # | Variable | Mean | Std. Deviation | %    | Degree |
|-----------------------|---|----------|------|----------------|------|--------|
| 3                     | 1 | Duration | 3.97 | .676           | 79.4 | High   |
| 2                     | 2 | Cost     | 4.02 | .612           | 80.3 | High   |
| 1                     | 3 | Quality  | 4.09 | .595           | 81.8 | High   |
| (E.projects success ) |   |          | 4.02 | -              | 80.5 | High   |

It is clear from the results shown in the above table that the means expressing the dimensions of the dependent variable (E.Project success) ranged between (3.97-4.09). The dimension "Quality" got the highest with a high degree, and dimension "Duration" got the lowest with a high degree also. The general index of E.project success reached (4.02) by (80.5%), which indicates that the degree of project success in Jordanian commercial banks came to a high degree. The following is a breakdown of the dimensions of the dependent variable:

##### 1) Duration:

Table (4-6) shows the means, standard deviations, and the order of the respondents' answers towards the dimension of the "Duration", which was measured based on three items.

**Table (4-6). Means and standard deviations of the answers of the study sample members towards the "Duration"**

| Rank     | #  | Variable  | Mean | Std. Deviation | %    | Degree |
|----------|----|---|------|----------------|------|--------|
| 2        | 21 | The project management adhered to most of the scheduled points      | 3.91 | .923           | 78.2 | High   |
| 1        | 22 | Project critical activities are completed within the specified time | 4.00 | .800           | 80.0 | High   |
| 1        | 23 | The project is completely implemented on time                       | 4.00 | .828           | 79.9 | High   |
| Duration |    |   | 3.97 | -              | 79.4 | High   |

The results shown in the above table indicate that the general indicator for the dimension of the " Duration" has reached (3.97) of the total scale area, which indicates a high level of success of the project shown by time in Jordanian commercial banks from the respondents' point of view. It is also noted that paragraphs No. (22,23) " Project critical activities are completed within the specified time, The project is completely implemented on time " got the highest estimates with a high mean of (4.00) and a standard deviations of (0.800, 0.828), and Paragraph No. (21) " The project management adhered to most of the scheduled points" got the lowest estimates with a mean of (3.91), which is an average with a high degree and a standard deviation of (0.923).

## **2) Cost:**

Table (4-7) shows the means, standard deviations, and the order of the respondents' answers towards the dimension of the " Cost," which was measured based on six items.

**Table (4-7). Means and standard deviations of the answers of the study sample members towards the "Cost."**

| Rank | #  | Variable  | Mean   | Std. Deviation | %    | Degree |
|------|----|---|--------|----------------|------|--------|
| 2    | 24 | The bank provides project resources according to the project schedule | 4.04   | .793           | 80.7 | High   |
| 6    | 25 | There were no major with- cost change requests during the project.    | 3.98   | .845           | 79.7 | High   |
| 1    | 26 | An appropriate budget is developed for the project                    | 4.05   | .839           | 81.0 | High   |
| 4    | 27 | The Project budget is managed appropriately                           | 4.01   | .844           | 80.2 | High   |
| 5    | 28 | Project costs are reduced without affecting the quality               | 3.99   | .856           | 79.7 | High   |
| 3    | 29 | The Project has been completed according to the budget allocated      | 4.03   | .843           | 80.6 | High   |
| Cost |    |   | 4.0158 | -              | 80.3 | High   |

The results shown in the above table indicate that the general indicator for the dimension of the "Cost" has reached (4.02) of the total scale area, which indicates a high level of success of the project shown by the cost in Jordanian commercial banks from the respondents' point of view. It is also noted that paragraph No. (26)" An appropriate budget is developed for the project," got the highest estimates with a high mean of (4.05) and a standard deviation of (0.839), and Paragraph No. (25) "There were no major with- cost change requests during the project" got the lowest estimates with a mean of (3.93), which is an average with a high degree and a standard deviation of (0.845).

### **3) Quality:**

Table (4-8) shows the means, standard deviations, and the order of the respondents' answers towards the dimension of the "Quality," which was measured based on five items.



**Table (4-8). Means and standard deviations of the answers of the study sample members towards the "Quality"**

| Rank    | #  | Variable   | Mean | Std. Deviation | %    | Degree |
|---------|----|--|------|----------------|------|--------|
| 5       | 30 | The project achieves its objectives as agreed  | 4.04 | .846           | 80.8 | High   |
| 4       | 31 | The project is entirely delivered in accordance with the quality standards for the banks         | 4.06 | .779           | 81.2 | High   |
| 1       | 32 | Project outputs achieve client requirements  | 4.13 | .769           | 82.6 | High   |
| 2       | 33 | The commitment by the quality standards for banks reduces errors in the project                  | 4.11 | .756           | 82.1 | High   |
| 3       | 34 | The adherence of the quality standards for banks enhances the efficiency of project team members | 4.10 | .760           | 82.0 | High   |
| Quality |    |  | 4.09 | -              | 81.8 | High   |

The results shown in the above table indicate that the general indicator for the dimension of the "Quality" has reached (4.09) of the total scale area, which indicates a high level of success of the project shown by the quality of Jordanian commercial banks from the respondents' point of view. It is also noted that paragraph No. (32)," Project outputs achieve client requirements," got the highest estimates with a high mean of (4.13) and a standard deviation of (0.769), and Paragraph No. (30)"The project achieves its objectives as agreed" got the lowest estimates with a mean of (4.04), which is an average with a high degree and a standard deviation of (0.846).

#### **4-2-3 Description of the moderator variable (Project Governance):**

Table (4-9) shows the means and standard deviations of the responses of the study sample towards the paragraphs of the moderated variable "Project Governance ":

**Table (4-9). Means and standard deviations of the answers of the study sample members towards the "Project Governance."**

| Rank               | #  | Variable  | Mean | Std. Deviation | %    | Degree |
|--------------------|----|---|------|----------------|------|--------|
| 11                 | 35 | The management board had overall responsibility for project governance  | 3.83 | .964           | 76.6 | High   |
| 10                 | 36 | Disciplined governance arrangements were applied throughout the project life cycle  | 3.97 | .866           | 79.4 | High   |
| 9                  | 37 | Roles and responsibilities for project governance were defined clearly  | 4.03 | .786           | 80.6 | High   |
| 7                  | 38 | The project's business case was supported by relevant and realistic information that provided a reliable basis for making authorization decisions | 4.07 | .762           | 81.3 | High   |
| 8                  | 39 | There were clearly defined criteria for reporting project status and for the escalation of risks and issues to the relevant organizational levels | 4.05 | .777           | 81.0 | High   |
| 7                  | 40 | Decisions made at authorization points were recorded and communicated to the relevant stakeholders  | 4.07 | .792           | 81.4 | High   |
| 6                  | 41 | The project had a project owner who was the single point of accountability in and to the bank for realizing project outcomes and benefits         | 4.08 | .804           | 81.6 | High   |
| 2                  | 42 | The project had a project manager who was accountable to the project owner for achieving project objectives and deliverables                      | 4.13 | .800           | 82.5 | High   |
| 2                  | 43 | The bank fostered a culture of frank internal disclosure of project management information  | 4.13 | .763           | 82.5 | High   |
| 7                  | 44 | Board members take the leading role in monitoring managements actions and decisions   | 4.07 | .800           | 81.4 | High   |
| 3                  | 45 | The Bank prepares guidelines that show employees procedures for implementing business.  | 4.12 | .757           | 82.3 | High   |
| 1                  | 46 | The board of Directors gives advice and offers suggestions to the management staff on issues related to the project affairs                       | 4.15 | .722           | 83.1 | High   |
| 4                  | 47 | The board of directors is keen on reviewing how the project resources are being used by the various departments                                   | 4.10 | .746           | 82.0 | High   |
| 6                  | 48 | The Bank adopts flexible administrative accountability mechanisms   | 4.08 | .765           | 81.7 | High   |
| 5                  | 49 | The Bank operates according to administrative accountability mechanisms declared to all employees.  | 4.09 | .786           | 81.8 | High   |
| 5                  | 50 | Board members of the bank have the combination of skills, (fundraising, management, legal, financial, marketing etc) necessary to do their work   | 4.09 | .776           | 81.8 | High   |
| Project Governance |    |   | 4.07 | -              | 81.3 | High   |

The results shown in the above table indicate that the general indicator for the dimension of the "Project Governance" has reached (4.07), which indicates a high level of Project Governance in Jordanian commercial banks from the respondents' point of view. It is also noted that paragraph No. (46), "The board of Directors gives advice and offers suggestions to the management staff on issues related to the project affairs," got the highest estimates with a high mean of (4.15) and a standard deviation of (0.722), and Paragraph No. (35) " The management board had overall responsibility for project governance" got the lowest estimates with a mean of (3.83), which is an average with a high degree and a standard deviation of (0.964).

### **4-3 Testing the hypotheses of the Study**

In this part, a review of hypothesis testing, where simple and multiple linear regression analysis was used, and the decision rules were used to accept or reject the following null hypothesis  $H_0$ :

Significance level ( $\alpha$ ): (0.05) has been adopted as the upper limit for the significance level.

Calculated value: The calculated value (F) is a second rule for rejecting or accepting the hypothesis. If the calculated value of F is greater than its tabular value, this indicates the rejection of the null hypothesis ( $H_0$ ), and we review the results of the hypotheses as follows:

#### 4-3-1 Main First Hypothesis Test Results:

**H01: There is no impact of HRM practices (selection and appointment, training and development, and Compensation system) on the success of E.projects in Jordanian commercial banks at ( $\alpha \leq 0.05$ ).**

Stepwise Regression was used to test this hypothesis, and the following table shows that:

**Table(4-10). Stepwise regression To impact independent variables on dependent variable**

| Dependent variable                    | Model Summery                           |                   |          |                   | ANOVA |         |                   | Coefficient                    |      |      |        |        |
|---------------------------------------|---|-------------------|----------|-------------------|-------|---------|-------------------|--------------------------------|------|------|--------|--------|
|                                       | Model                                   | R                 | R Square | Adjusted R Square | df    | F       | Sig. F            | variable                       | B    | Beta | T      | Sig. T |
| projects success                      | 1                                       | .785 <sup>a</sup> | .616     | .615              | 1/377 | 604.784 | .000 <sup>b</sup> | Training and Development (TD)  | .756 | .785 | 24.592 | .000   |
|                                       | 2                                       | .834 <sup>b</sup> | .695     | .693              | 2/376 | 428.084 | .000 <sup>c</sup> | Training and Development (TD)  | .468 | .486 | 11.675 | .000   |
|                                       |   |                   |          |                   |       |         |                   | Compensation system (CS)       | .378 | .410 | 9.856  | .000   |
|                                       | 3                                       | .851 <sup>c</sup> | .725     | .723              | 3/375 | 329.296 | .000 <sup>d</sup> | Training and Development (TD)  | .330 | .342 | 7.528  | .000   |
|                                       |   |                   |          |                   |       |         |                   | Compensation system (CS)       | .298 | .323 | 7.717  | .000   |
|                                       |   |                   |          |                   |       |         |                   | Selection and appointment (SA) | .260 | .276 | 6.394  | .000   |
|                                       | * Significant at ( $\alpha \leq 0.05$ ) |                   |          |                   |       |         |                   |                                |      |      |        |        |
| Tabulated F = 2.6, Tabulated T = 1.96 |   |                   |          |                   |       |         |                   |                                |      |      |        |        |

From the results in above table we note that a stepwise regression gives a three model:

**First model:** a variable (Training and Development (TD)) had the most influence on the dependent variable (Project process), as the value of B (0.756).

**Second model:** a variables (Training and Development (TD), Compensation system (CS)) had the most influence on the dependent variable (Project process), as the value of  $B(0.468)$  for variable training and development, and  $B(0.378)$  for variable compensation system.

**Third model:** we note that the independent variables combined (selection and appointment, training and development and Compensation system) have a statistically significant effect on project success, as the calculated F value (329,295) is greater than its tabular and equal value (2.6), which is significant at a significance level less than (0.05), which indicates the significance of the study model at a degree of freedom (3/375), and the value of  $R^2$  (0.725) indicates that the HRM practices explained 72.5% of the variance in project success, and through Correlation coefficient R (85.1) we note that there is a strong relationship between the HRM practices and project success.

The results of the coefficients table for this hypothesis show that the "Training and Development (TD)" dimension had the greatest impact on project process, as it reached a beta value of (0.342), and the calculated T value reached (7.528), which is greater than its tabular value (1.96) and is statistically significant at a lower level. of (0.05), and came in second place "Compensation system (CS)" where the beta value was (0.323), and the calculated T value reached (7.717) which is greater than its tabular value (1.96) and statistically significant at a level less than (0.05), and then "Selection and appointment (SA)" where the beta value was (0.276), and the calculated T value was (6.394), which is greater than its tabular value (1.96) and statistically significant at a level less than (0.05).

Based on the above, we reject the null hypothesis and accept the alternative hypothesis which states: There is an impact of HRM practices (selection and

appointment, training and development and Compensation system) on the success of the engineering project in Jordanian commercial banks at ( $\alpha \leq 0.05$ ).

#### 4-3-1-1 The results of testing the sub-hypotheses:

To test the sub-hypotheses, multiple regression was used, and the table (4-10) table shows that, and from the results, the researcher noted that:

- There is an impact of selection and appointment on the success of E.projects in Jordanian commercial banks at ( $\alpha \leq 0.05$ ).
- There is an impact of training and development on the success of E.projects in Jordanian commercial banks at ( $\alpha \leq 0.05$ ).
- There is an impact of the compensation system on the success of E.projects in Jordanian commercial banks at ( $\alpha \leq 0.05$ ).

#### 4-3-2 Main Second Hypothesis Test Results:

**H02: Project governance dose not moderates the impact of HRM practices (selection and appointment, training and development, and compensation system) on the success of E.projects in Jordanian commercial banks at ( $\alpha \leq 0.05$ ).**

To test the Second Main hypothesis, hierarchical regression analysis and the results shown in the following table illustrate that:

**Table (4-11). Results of the influence of the HRM Practices on E.Project success with the presence of project governance**

| Dependent variable | Independent Variable           | First step |              |        | Second step |              |        |
|--------------------|--------------------------------|------------|--------------|--------|-------------|--------------|--------|
|                    |                                | Beta       | Calculated T | Sig. t | Beta        | Calculated T | Sig. t |
| E.Project success  | Selection and appointment (SA) | .276       | 6.394        | .000*  | .163        | 3.995        | .000*  |
|                    | Training and Development (TD)  | .342       | 7.528        | .000*  | .245        | 5.800        | .000*  |
|                    | Compensation system (CS)       | .323       | 7.717        | .000*  | .231        | 5.953        | .000*  |
|                    | HRM Practices                  | .851       | 31.461       | .000*  | .578        | 15.307       | .000*  |
|                    | Project Governance             |            |              |        | .357        | 9.445        | .000*  |

|  |                                |         |         |
|--|--------------------------------|---------|---------|
|  | <b>R</b>                       | .851    | .882    |
|  | <b>R<sup>2</sup></b>           | .724    | .777    |
|  | <b><math>\Delta R^2</math></b> | .724    | 0.053   |
|  | <b>F</b>                       | 989.769 | 89.202  |
|  | <b>Sig. F</b>                  | 0.000*  | .0.000* |

The above table displays the results of a hierarchical regression based on two models, and the results of the first model based on the first step of the analysis reflected the presence of a statistically significant effect of the independent variable (HRM Practices) on the dependent variable (E.Project success), where the value of F (989.769) and the level of significance (0.000) was less than (0.05), and the value of the coefficient of determination ( $R^2$ ) (0.724), which indicates that the independent variable explains its (72.4%) of the variance in the dependent variable.

In the second step, a variable (Project Governance) was entered into the regression model as the value of the coefficient of determination increased. It is a statistical significant, where the value of F reached (89.202) at a level of significance (0.000) less than 0.05. The value of beta was at as a change (.357 ) and the value of t (9.445) and a level of significance (0.000) and this confirms the significant effect of the variable (Project Governance) in modifying the effect of the independent variable on the dependent variable, where the percentage of interpretation of the total variance improved by (5.3%) to rise from (72.4%) to (77.7%).

Based on the above, we reject the null hypothesis and accept the alternative hypothesis, which states: Project governance moderates the impact of HRM practices (selection and appointment, training and development, and compensation system) on the success of E.projects in Jordanian commercial banks at ( $\alpha \leq 0.05$ ).

## **Chapter Five**

### **Discussing findings and recommendations**



## **Chapter Five**

### **Discussing findings and Recommendations**

#### **5-1 Introduction**

In this chapter, the results were discussed in light of the results of the statistical analysis process responding to the sample's answers to a study's variables, with the aim of identifying the Impact of human resource management practices on the success of Engineering projects in Jordanian commercial banking sector, and to investigate the moderating role of project governance in the impact of HRM practices on projects success.

#### **5-2 Discussing Descriptive Results**

##### **5-2-1 Discussing the results of the descriptive analysis of the independent variable:**

The results of the study showed that the degree of HRM practices in Jordanian commercial banks came to a high degree, and the all dimensions that represent HRM practices got a high degree ranged between (3.97-4.02), and the dimension " Compensation system (CS)" got the highest with a high degree, and dimension "Selection and appointment (SA)" got the lowest with a high degree also.

The researcher attributes this result to the fact that banks are concerned with human resource management and apply its dimensions to a large extent as required by the nature of all banks, the necessary accuracy, and quick completion of work.

- The results of the study showed that a high level of the Selection and appointment (SA) in Jordanian commercial banks from the respondents' point of view is due to the fact that the bank uses Standardized tests in the selection process of employees and uses comprehensive selection process before rendering a decision.

- The results of the study showed a high level of the Training and Development (TD) in Jordanian commercial banks from the respondents' point of view; this is due to the fact that the bank evaluates the effectiveness of training programs using scientific evaluation methods and holds orientation training programs for new employees to acquire work skills.

- The results of the study showed indicate a high level of Compensation system (CS) in Jordanian commercial banks from the respondents' point of view, this is due to the fact that the bank compensation offered by the bank matches the expectancy of employees, and In general, I understand why I get what I get, and the compensation for all employees is directly linked to their performance.

#### **5-2-2 Discussing the results of the descriptive analysis of the dependent variable:**

The results of the study showed that the degree of E.project success in Jordanian commercial banks came to a high degree. The means expressing the dimensions of the dependent variable (Engineering Project success) ranged between (3.97-4.09). The dimension “Quality” got the highest with a high degree, and the dimension "Duration” got the lowest with a high degree also.

The study results showed a high level of success of E.project shown by time in Jordanian commercial banks from the respondents' point of view; this is because the critical project activities are completed within the specified time and is completely implemented on time.

- The results of the study showed a high level of success of E. project demonstrated by cost in Jordanian commercial banks from the respondents' point of view, this is due

to the fact that an appropriate budget is developed for the project, and the bank provides project resources according to the project schedule.

- The results of the study showed a high level of success of E.project shown by quality in Jordanian commercial banks from the respondents' point of view, this is due to the fact that Project outputs achieve client requirements, and the commitment by the quality standards for banks reduces errors in the project.

### **5-2-3 Discussing the results of the descriptive analysis of the moderated variable:**

The results of the study showed a high level of Project Governance in Jordanian commercial banks from the respondents' point of view, this is due to the fact that the board of directors gives advice and offers suggestions to the management staff on issues related to the project affairs, and the project had a project manager who was accountable to the project owner for achieving project objectives and deliverables, and the bank fostered a culture of frank internal disclosure of project management information.

## **5-3 Discussing the Results of the Study Hypotheses**

### **5-3-1 Discussing the results of the first main hypothesis:**

The results of the study showed there is an impact of HRM practices (selection and appointment, training and development and Compensation system) on the success of Engineering projects in Jordanian commercial banks at ( $\alpha \leq 0.05$ ).

The researcher attributes that this result is due to the fact that human resource management practices are one of the basics for the success of any project, as the application of human resource management practices encourages working cadres to engage in their work actively and effortlessly and provide their knowledge and experience, thus reaching the completion of a successful project.

The result of this study agreed with the study of Adnane Belout\*, Clothilde Gauvreau, (2004), were concludes that all factors (including human resource management) are significantly related to project success and that this relationship varies across different lifecycle stages. Project, as well as the type of project area and its organizational structure, and with Yang et al., ( 2015) were results indicate that the positive relationship between human resource management practices and project success depends on the working environment (working hours, free time), and with the study of Masood Elahi\* and Muhammad Shakil Ahmad,(2020) concluded that the selected four HRM practices, ETD and ECS had a positive significant relationship with E.PS.

#### **5-3-1-1 Discussing the results of the first sub-hypothesis:**

- The results of the study showed there is an impact of selection and appointment on the success of E.projects in Jordanian commercial banks at ( $\alpha \leq 0.05$ ).

The researcher attributes this result to the fact that the application of the selection and appointment variable results in the selection of qualified and experienced employees, which contributes greatly to the success of E.projects, as they need competence and experience.

The result of this study agreed with the study of Khan and Farooq, ( 2014) where the result indicates that “work ethic only has a changing effect on the relationship between employee selection and appointment and E.project success. And Huma Sarwar1, Junaid Aftab1\*, Haisam Sarwar2, Amna Shahid1, (2016) concluded that a significant impact of the selection and appointment of staff in human resource management practices, employee performance evaluation” on project success, and with the study of Alili Amen, Diab Zaqqay, Swar Yousef (2018) were found a positive and

moral impact on the selection and appointment of employees on the success of the project.

And the result of this study conflicts with the study of Rueda Contreras, Jiménez Almaguer, S.nchez Tovar, ( 2015) concluded that a staff selection did not have a significant effect on project performance.

### **5-3-1-2 Discussing the results of the second sub-hypothesis:**

- The results of the study showed there is an impact of training and development on the success of E.projects in Jordanian commercial banks at ( $\alpha \leq 0.05$ ).

The researcher attributes this result is due to the fact that training leads to developing the capabilities of human resources and keeping pace with technological developments at work, which contributes to the success of E.projects.

The result of this study agreed with the study of Rueda Contreras, Jiménez Almaguer, S.nchez Tovar, ( 2015) were concluded that a positive impact of Human resource management practices “training system and employee compensation” on project performance and with the study of Amin Akhavan Tabassi \*, A.H. Abu Bakar,(2008) were concluded that the quality of construction projects is strongly correlated with workforce training in HRM practices, and with the study of Masood Elahi\* and Muhammad Shakil Ahmad,(2020) concluded that the organizations with a focus on training and development of their employees with periodic training programs and having compensation system based on performance as well as a reward system in place contributes to the project success in projects of Pakistan.

The result of this study conflicts the study of with Huma Sarwar<sup>1</sup>, Junaid Aftab<sup>1\*</sup>, Haisam Sarwar<sup>2</sup>, Amna Shahid<sup>1</sup>, (2016) were conclude that there is no significant effect of training and Employee development on project success.

#### **5-3-1-3 Discussing the results of the third sub-hypothesis:**

- The results of the study showed there is an impact of the compensation system on the success of E. projects in Jordanian commercial banks at ( $\alpha \leq 0.05$ ).

The researcher attributes that this result is due to the fact that the compensation system is considered as a reward and incentive for the employee to be presented to him based on his performance at work, which encourages the employee to support you with his work to the fullest in order to obtain it and has the greatest impact on the success of E.projects.

#### **5-3-2 Discussing the results of the second main hypothesis:**

The results of the study showed there is a statistically significant effect at the level of significance ( $\alpha \leq 0.05$ ) for HRM practices on E.project success with the presence of Project governance as a mediating variable in Jordanian commercial banks and with a total sum effect of (0.854) at the level ( $\alpha \leq 0.05$ ).

The result of this study agreed with the study of Yang et al. (2015), where results indicate that the positive relationship between human resource management practices and project success depends on the working environment (working hours, free time).

### **5-4 Conclusion**

- Through this study, the researcher attempted to find out the impact of human resource management practices on the success of E.projects in the Jordanian commercial banking sector after an analytical study based on a questionnaire

conducted to Jordanian commercial banks, where they found that there is a positive impact of employee selection and appointment, training and development and compensation system on E.project success and outcomes. This result is consistent with the results of previous studies.

- Banks are concerned with human resource management and apply its dimensions to a large extent as required by the nature of all banks; the necessary accuracy and quick completion of work lead to the success of projects, as shown in the results of this study.
- Banks use Standardized tests in the selection process of employees and use a comprehensive selection process before rendering a decision which leads to the success of E.projects, but it has the lowest value among HRM dimensions.
- Banks evaluate the effectiveness of training programs using scientific evaluation methods and hold orientation training programs for new employees to acquire work skills; it has the highest value among HRM dimensions which leads to the success of E.projects.
- Compensation offered by the bank matches the expectancy of employees, and in general, the compensation for all employees is directly linked to their performance, leading to the success of E.projects.
- Governance in banks gives advice and offers suggestions to the management staff on issues related to the project affairs, and the project had a project manager who was accountable to the project owner for achieving project objectives and deliverables which leads to the success of E.projects

## 5-5 Recommendations

Based on the results obtained, the researcher recommends the following:

### **Recommendations for the Jordanian commercial banks:**

1. The need to continue enhancement to the (selection and appointment, training and development and compensation system) through the commercial banking field and understand the importance of the (selection and appointment, training and development and compensation system) to increase the success of E.projects in the commercial banking field.
2. Jordanian commercial banks must continue to pay attention to doing more effective mechanisms in selecting and appointment of project personnel, which (selection and appointment) have the lowest value in the study results.
3. Jordanian commercial banks must proceed permanently with the implementation of a compensation system, which has a clear and effective impact on the success of E.projects in Jordanian commercial banks, as shown in the results of the study.
4. Jordanian commercial banks must proceed permanently with the training and development programs for the employees, which has a clear and effective impact on the success of E.projects in Jordanian commercial banks, as shown in the results of the study
5. Jordanian commercial banks, as shown in the results of the study, have effective governance that ensures E.project success, which has an effective impact on the independent variables (selection and appointment, training and development, and Compensation system).



**Recommendations for the Researchers:**

1. The study recommends researchers carry out studies on the same topic, related to other economic sectors such as oil and gas companies, and industrial companies, as these companies are projects service and productivity, and they need to study the impact of the project team's skills on the success of these projects.
2. The study recommends that researchers conduct investigations in the same sector, dealing with the impact of HRM practices on the success of E.projects in Jordanian commercial banks in other countries.
3. As the results shows that factors in the model, the study recommends that other factors may affect the success of E.projects, such as the size of the project and the rules and regulations that may affects on E.project's success.

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## Appendices

### Appendix (1)

#### List of arbitrators

| Name                | Major                         | Academic rank  | workplace                   |
|---------------------|-------------------------------|--|-----------------------------|
| Ahmad Ali Salih     | Business Administration       | Professor  | Middle East University      |
| Asma`a Al-Amarneh   | Financial and accounting      | Professor  | Middle East University      |
| Abeer Al-Faouri     | Management information system | Associate Professor  | Al-Balqa Applied University |
| Abdallah Bataineh   | Marketing                     | Associate Professor  | Middle East University      |
| Mohammad Al-Ma`itah | Management information system | Associate Professor  | Al-Balqa Applied University |
| Sameer Al Jabali    | Marketing                     | Associate Professor  | Middle East University      |
| Bashar Fakhouri     | Engineering                   | Executive Manager of engineering and administration affairs department | Housing Bank                |
| Manal Sha`ban       | Engineering                   | Head of Engineering Center   | Housing Bank                |

## Appendix (2)

|  |
|--|
| Arab bank                              |
| bank al Etihad                         |
| Jordan Commercial Bank                 |
| Arab Jordan Investment Bank (AJIB)     |
| The Housing Bank for Trade and Finance |
| Invest Bank                            |
| Arab Banking Corporation -Jordan       |
| Societe Generale De Banque - Jordanie  |
| Bank of Jordan                         |
| Cairo Amman Bank                       |
| Capital Bank of Jordan                 |
| Jordan Kuwait Bank                     |
| Jordan Ahli Bank                       |

### Appendix (3)



Middle East University

Business faculty

Business Department

Dear Prof,

In today's business environment, human resources are seen as a company's most valuable asset, which it employs largely to achieve its objectives . The basis of competitiveness is shifting as a result of the ever-increasing rate of technological advancement . However, to achieve optimal performance goals, modern organizations must adhere to human resource management (HRM) practices.

Khan and Rasheed (2015) found that selected HR practices (employee recruitment and selection, employee training and training, employee compensation systems, and employee performance assessment) influence awareness of E.project success. Found to give. Analysis has shown that project-based organizations are unusual in nature, so only selected HR practices are important.

Successful organizations have always strived to build reliable human resource management systems, but few can afford it due to the very high costs associated with creating dedicated and separate departments. Summarizing the various perspectives, it can be concluded that HRM is a defined building and process including, but not limited to, recruitment and selection, evaluation, training and development, employee engagement, career planning systems, professional growth and compensation system.

In order to complete the master's degree in Business Administration Department, Middle East University, Amman-Jordan.

In acknowledgment of your esteemed, well known academic extensive experience and scientific experts the researcher turns to you in respect of evaluating the attached questionnaire, which was developed based on previous studies relevant to the study variables, taking into account the formulation, adaptation and modification of the paragraphs in line with current trends. Your notes and input will highly value in bolstering the questionnaire's paragraphs making them more valid for the purpose they were composed for.

Please note that basis of the questionnaire measurement would be a five-point Likert scale, employed accordingly:

|                |       |                |          |                   |
|----------------|-------|----------------|----------|-------------------|
| Strongly agree | Agree | Somewhat agree | Disagree | Strongly disagree |
| 5              | 4     | 3              | 2        | 1                 |

### Study Hypothesis:

**H1:** There is no impact of HRM practices (selection and appointment, training and development and Compensation system) on the success of projects in Jordanian commercial banks at ( $\alpha \leq 0.05$ ).

The following sub –hypothesis are derived from the key hypothesis above:

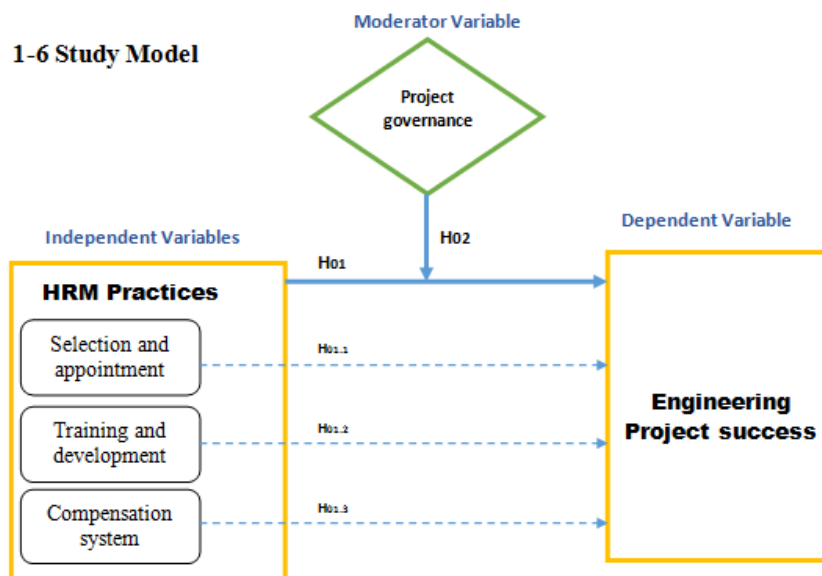
**H1.1:** There is no impact of selection and appointment on the success of engineering projects in Jordanian commercial banks at ( $\alpha \leq 0.05$ ).

**H1.2:** There is no impact of training and development on the success of engineering projects in Jordanian commercial banks at ( $\alpha \leq 0.05$ ).

**H1.3:** There is no impact of compensation system on the success of engineering projects in Jordanian commercial banks at ( $\alpha \leq 0.05$ ).

**H2:** Project governance dose not moderate the impact of HRM practices (selection and appointment, training and development and compensation system) on the success of engineering projects in Jordanian commercial banks at ( $\alpha \leq 0.05$ )

### Study Model:



**Figure (1-1): Study model**

The researcher prepared the model based on the review of the sources below  
 the model's structure was adopted from the following studies  
 (Aftab, Sarwar, Shahid, 2016; Khan and Farooq, 2014; Yanget al., 2015)for HRM ;manjupatel  
 2016 (for PG)

## Demographic data

Please tick the appropriate response box:

### Your Title:

- ☐ Engineer   ☐ Sr. Engineer   ☐ Human resource officer   ☐ Supervisor  
☐ Head of Section

### Name of your Bank ?

- ☐ Housing bank   ☐ Arab Bank   ☐ Jordan Kuwait bank   ☐ Bank al Etihad  
☐ Amman Cairo Bank   ☐ Bank of Jordan   ☐ Jordan Ahli Bank   ☐ Capital bank of  
Jordan   ☐ Jordan Commercial Bank   ☐ Arab Jordan Investment Bank   ☐ Invest  
Bank   ☐ Societe Generale de Banque /Jodanie   ☐ Arab Banking Corporation

### Educational qualification

- ☐ Diploma   ☐ BCSA   ☐ High diploma   ☐ Master   ☐ PHD

### Years of Experience:

- ☐ Less than 5   ☐ 5 - less than 10   ☐ 10 - less than 15   ☐ 15  
and above

### Number of Projects you Participated in during Years of Experience

- ☐ Less than 10 Projects   ☐ 11-12 Projects   ☐ More than 20 projects

### Gender:

- ☐ Female   ☐ Male

### Age (years):

- ☐ 22 – less than 30   ☐ 30 - less than 38   ☐ 38 -Less than 46  
☐ 46 and above

### Monthly income (JD) :

- ☐ Less than 500   ☐ 500 - <1000   ☐ 1000 - <1500  
☐ 1500 - <2000   ☐ more than 2000



| NO.   | Item  | Item Clarity |          | Item Appropriate to measure |                  | Item Relationship |            | Appropriate Adjust ment |
|---|---|--------------|----------|-----------------------------|------------------|-------------------|------------|-------------------------|
|   |   | Clear        | Uncle ar | Approp riate                | Not Approp riate | Related           | Unrelat ed |                         |
| <b>Independent Variable:</b><br><br>factors affecting the engineering project success in jordanian commercial banks , the role of selection and appoitment , training and development and compensation sysytem on the project sucess<br><b>المتغير المستقل:</b> مجموعة العوامل التي تؤثر على نجاح المشاريع في قطاع البنوك التجارية الاردنية وهذه العوامل هي ( الاختيار والتعيين ، التدريب والتطوير ، نظام التعويضات ) |   |              |          |                             |                  |                   |            |                         |
| <b>Selection and appointment (SA) :</b> refers to choose the proper and the right candidate for the right job with the right skills, ability to perform and contribute to the success of the project<br><b>الاختيار والتعيين:</b> وهي اختيار الشخص المناسب والملائم للوظيفة المناسبة مع المهارات والخبرات الملائمة بحيث تساهم في انجاز المشروع وانجابه .  |   |              |          |                             |                  |                   |            |                         |
| 1   | The bank (selection and apointment) system followed is well defined.<br>يستخدم البنك في عملية الاختيار والتعيين نظاما محددا جيدا              |              |          |                             |                  |                   |            |                         |
| 2   | The bank uses Standardized tests in the selection process of employees<br>يستخدم البنك الاختبارات الموحدة في عملية اختيار الموظفين            |              |          |                             |                  |                   |            |                         |
| 3   | The bank uses comprehensive selection process before rendering a decision<br>يستخدم البنك عملية اختيار شاملة قبل اتخاذ القرار                 |              |          |                             |                  |                   |            |                         |
| 4   | The bank uses unbiased test and interviewing techniques for selection<br>يستخدم البنك اختبارا غير متحيز وتقنيات إجراء المقابلات للاختيار.     |              |          |                             |                  |                   |            |                         |
| 5   | The bank has strong merit criteria for candidates selection.<br>يمتلك البنك معايير جدارة قوية لاختيار المرشحين                                |              |          |                             |                  |                   |            |                         |
| 6   | The bank uses attitude and desire to work in a team and individual as a criterion in selection<br>يعتمد البنك الرغبة في العمل كمؤشر للاختيار. |              |          |                             |                  |                   |            |                         |

| NO.  | Item  | Item Clarity |          | Item Appropriate to measure |                  | Item Relationship |            | Appropriate Adjust ment |
|--|---|--------------|----------|-----------------------------|------------------|-------------------|------------|-------------------------|
|  |   | Clear        | Uncle ar | Approp riate                | Not Approp riate | Related           | Unrelat ed |                         |
| <b>Training and Development (TD):</b> It is one of the practices that contributes to success in terms of increasing productivity, reducing costs and motivating employees , whereby employees gain valuable information as well as expertise in the implementation professional obligations<br><b>التدريب والتطوير :</b> إحدى الممارسات التي تساهم في النجاح من حيث زيادة الإنتاجية وتقليل التكاليف وتحفيز الموظفين ، حيث يكتسب الموظفون معلومات قيمة بالإضافة إلى الخبرة في تنفيذ الالتزامات المهنية. |   |              |          |                             |                  |                   |            |                         |
| 7  | The Bank implements training and development programs based on the performance gap<br>ينفذ البنك برامج تدريب وتطوير مكثفة بناء على فجوة الاداء.                       |              |          |                             |                  |                   |            |                         |
| 8  | The Bank conducts annual specialized training programs for each job<br>يقيم البنك برامج تدريب سنوية تخصصية لكل وظيفة  |              |          |                             |                  |                   |            |                         |
| 9  | The Bank holds orientation training programs for new employees to acquire work skills<br>يعقد البنك برامج تدريب توجيهي للموظفين الجدد لاكساب مهارات العمل.            |              |          |                             |                  |                   |            |                         |
| 10   | The Bank evaluates the effectiveness of training programs using scientific evaluation methods.<br>يقوم البنك بتقييم فعالية برامج التدريب باستخدام طرق التقييم العلمي. |              |          |                             |                  |                   |            |                         |
| 11   | T&D has helped reduce employee turnover in the bank<br>يساعد التدريب والتطوير في تقليل معدل دوران الموظفين في البنك   |              |          |                             |                  |                   |            |                         |
| 12   | T&D has resulted in higher employee performance in the bank<br>ينتج عن التدريب والتطوير اداء اعلى للموظفين في البنك   |              |          |                             |                  |                   |            |                         |
| 13   | T&D has resulted in higher financial returns for the bank<br>يؤدي التدريب والتطوير إلى عائدات مالية اعلى للبنك  |              |          |                             |                  |                   |            |                         |

| NO.  | Item   | Item Clarity |          | Item Appropriate to measure |                  | Item Relationship |            | Appropriate Adjust ment |
|--|--|--------------|----------|-----------------------------|------------------|-------------------|------------|-------------------------|
|  |  | Clear        | Uncle ar | Approp riate                | Not Approp riate | Related           | Unrelat ed |                         |
| <b>Compensation system (CS):</b> is an incentive received for services rendering for the organization . It motivates employees towards performance and ultimately to organizational effectiveness .<br><b>نظام التعويضات (CS):</b> هو حافز يتم تلقيه مقابل تقديم خدمات للمنظمة. فهو يحفز الموظفين نحو الأداء وفي النهاية إلى الفعالية التنظيمية. |  |              |          |                             |                  |                   |            |                         |
| 14   | Compensation offered by the bank matches the expectancy of employees.<br>يقدم البنك تعويضات تقترب من توقعات الموظفين.                |              |          |                             |                  |                   |            |                         |
| 15   | The bank determines salaries on the basis of market competitiveness<br>يحدد البنك الرواتب على اساس المقارنة التنافسية السوقية        |              |          |                             |                  |                   |            |                         |
| 16   | The bank determines compensation based on the employee's competence .<br>يحدد البنك التعويض على أساس كفاءة الموظف                    |              |          |                             |                  |                   |            |                         |
| 17   | The compensation for all employees is directly linked to their performance.<br>ترتبط تعويضات جميع الموظفين ارتباطاً مباشراً بأدائهم. |              |          |                             |                  |                   |            |                         |
| 18   | The bank offers both financial and non-financial rewards without discrimination<br>يقدم البنك مكافآت مالية وغير مالية دون تمييز      |              |          |                             |                  |                   |            |                         |
| 19   | My last year's salary raise was better than the previous one.<br>زيادة راتبي العام الماضي كانت أفضل من سابقتها                       |              |          |                             |                  |                   |            |                         |
| 20   | In general, I understand why I get what I get<br>بشكل عام، أفهم لماذا أحصل على ما أحصل عليه  |              |          |                             |                  |                   |            |                         |

| NO.  | Item   | Item Clarity |          | Item Appropriate to measure |                  | Item Relationship |            | Appropriate Adjust ment |
|--|--|--------------|----------|-----------------------------|------------------|-------------------|------------|-------------------------|
|  |  | Clear        | Uncle ar | Approp riate                | Not Approp riate | Related           | Unrelat ed |                         |
| <b>Dependent Variable: (projects success ):</b> The concept of project success was developed to set the standard Criteria to help project participants carry out the project the most desirable results were obtained . so the success of the project divided in two parts, the success of the project itself. Shown by time, cost, quality<br><b>المتغير التابع (نجاح المشاريع):</b> تم تطوير مفهوم نجاح المشروع لوضع المعايير القياسية لمساعدة المشاركين في المشروع على تنفيذ المشروع و الحصول على النتائج المرغوبة. لذلك انقسم نجاح المشروع إلى قسمين ، نجاح المشروع نفسه. تظهر بالوقت والتكلفة والجودة |  |              |          |                             |                  |                   |            |                         |
| 21   | The project management adhered to most of the scheduled points<br>التزمت إدارة المشروع بمعظم النقاط المجدولة                       |              |          |                             |                  |                   |            |                         |
| 22   | Project critical activities are completed within the specified time<br>تم الانتهاء من الأنشطة الهامة للمشروع في غضون الوقت المحدد. |              |          |                             |                  |                   |            |                         |
| 23   | The project is completely implemented on time<br>تم تنفيذ المشروع بالكامل في الوقت المحدد  |              |          |                             |                  |                   |            |                         |
| 24   | The bank provides project resources according to the project schedule<br>يوفر البنك موارد المشروع وفقاً لجدول المشروع              |              |          |                             |                  |                   |            |                         |
| 25   | There were no major with- cost change requests during the project .<br>لم تظهر هناك اوامر تغييرية رئيسية بالتكلفة أثناء المشروع.   |              |          |                             |                  |                   |            |                         |
| 26   | An appropriate budget is developed for the project<br>تم وضع ميزانية مناسبة للمشروع .  |              |          |                             |                  |                   |            |                         |
| 27   | The Project budget is managed appropriately<br>تدار ميزانية المشروع بشكل مناسب .   |              |          |                             |                  |                   |            |                         |
| 28   | Project costs are reduced without affecting the quality<br>تم تقليل تكاليف المشروع دون التأثير على الجودة                          |              |          |                             |                  |                   |            |                         |
| 29   | The Project has completed according to the budget allocated<br>تم انجاز المشروع حسب الميزانية المخصصة                              |              |          |                             |                  |                   |            |                         |
| 30   | The project achieves its objectives as agreed<br>يحقق المشروع أهدافه على النحو المتفق عليه   |              |          |                             |                  |                   |            |                         |

| NO.  | Item  | Item Clarity |         | Item Appropriate to measure |                 | Item Relationship |           | Appropriate Adjust ment |
|--|---|--------------|---------|-----------------------------|-----------------|-------------------|-----------|-------------------------|
|  |   | Clear        | Unclear | Appropriate                 | Not Appropriate | Related           | Unrelated |                         |
| 31   | The project is delivered completely in accordance with the quality standards for the banks<br>يتم تسليم المشروع بالكامل وفق معايير الجودة للبنوك                    |              |         |                             |                 |                   |           |                         |
| 32   | Project outputs achieve client requirements<br>مخرجات المشروع تحقق متطلبات العميل   |              |         |                             |                 |                   |           |                         |
| 33   | The commitment by the quality standards for banks reduces errors in the project<br>الالتزام بمعايير الجودة للبنوك يقلل من الأخطاء في المشروع                        |              |         |                             |                 |                   |           |                         |
| 34   | The adherence of the quality standards for banks enhances the efficiency of project team members<br>إن الالتزام بمعايير الجودة للبنوك يعزز كفاءة أعضاء فريق المشروع |              |         |                             |                 |                   |           |                         |
| <p><b>Moderating Variable: (Project Governance):</b> Involving a set of relationships between a company's management, its board, its shareholders and other stakeholders [...] and should provide proper incentives for the board and management to pursue objectives that are in the interests of the company and its shareholders and should facilitate effective monitoring.</p> <p>المتغير المعدل ( حاكمية المشروع ) : تتضمن مجموعة من العلاقات بين إدارة الشركة ومجلس إدارتها ومساهميها وأصحاب المصلحة الآخرين. ويجب أن توفر حوافز مناسبة لمجلس الإدارة والإدارة لمتابعة الأهداف التي تصب في مصلحة الشركة و يجب على مساهميها تسهيل المراقبة الفعالة</p> |   |              |         |                             |                 |                   |           |                         |
| 35   | The management board had overall responsibility for project governance<br>يتحمل مجلس الإدارة المسؤولية الكاملة عن إدارة المشروع                                     |              |         |                             |                 |                   |           |                         |
| 36   | Disciplined governance arrangements were applied throughout the project life cycle<br>يتم تطبيق اليات الحوكمة المنضبطة طوال دورة حياة المشروع                       |              |         |                             |                 |                   |           |                         |
| 37   | Roles and responsibilities for project governance were defined clearly<br>يتم تحديد الأدوار والمسؤوليات الخاصة بإدارة المشروع بشكل واضح                             |              |         |                             |                 |                   |           |                         |

| NO. | Item   | Item Clarity |         | Item Appropriate to measure |                 | Item Relationship |           | Appropriate Adjust ment |
|-----|--|--------------|---------|-----------------------------|-----------------|-------------------|-----------|-------------------------|
|     |  | Clear        | Unclear | Appropriate                 | Not Appropriate | Related           | Unrelated |                         |
| 38  | The project's business case was supported by relevant and realistic information that provided a reliable basis for making authorization decisions<br>يتم دعم دراسة الجدوى للمشروع بمعلومات ذات صلة وواقعية قدمت أساساً موثقاً به لاتخاذ قرارات التفويض                 |              |         |                             |                 |                   |           |                         |
| 39  | There were clearly defined criteria for reporting project status and for the escalation of risks and issues to the relevant organizational levels.<br>يتم تطبيق معايير محددة بوضوح للإبلاغ عن حالة المشروع ولتصعيد المخاطر والقضايا إلى المستويات التنظيمية ذات الصلة. |              |         |                             |                 |                   |           |                         |
| 40  | Decisions made at authorization points were recorded and communicated to the relevant stakeholders<br>يتم تسجيل القرارات المتخذة في نقاط التفويض ويتم وإبلاغ المعنيين من أصحاب المصلحة.  |              |         |                             |                 |                   |           |                         |
| 41  | The project had a project owner who was the single point of accountability in and to the bank for realizing project outcomes and benefits<br>يكون للمشروع مالك مشروع بحيث يعتبر النقطة الوحيدة للمساءلة في البنك وتجاهها لتحقيق نتائج وفوائد المشروع                   |              |         |                             |                 |                   |           |                         |
| 42  | The project had a project manager who was accountable to the project owner for achieving project objectives and deliverables<br>يكون للمشروع مدير مشروع بحيث يكون مسؤولاً أمام صاحب المشروع عن تحقيق أهدافه ونواتجه  |              |         |                             |                 |                   |           |                         |
| 43  | The bank fostered a culture of frank internal disclosure of project management information<br>يعزز البنك ثقافة الإفصاح الداخلي الصريح عن معلومات إدارة المشروع   |              |         |                             |                 |                   |           |                         |
| 44  | Board members take the leading role in monitoring management's actions and decisions<br>يأخذ أعضاء مجلس الإدارة الدور الرائد في مراقبة إجراءات وقرارات الإدارة   |              |         |                             |                 |                   |           |                         |

| NO. | Item   | Item Clarity |         | Item Appropriate to measure |                 | Item Relationship |           | Appropriate Adjust ment |
|-----|--|--------------|---------|-----------------------------|-----------------|-------------------|-----------|-------------------------|
|     |  | Clear        | Unclear | Appropriate                 | Not Appropriate | Related           | Unrelated |                         |
| 45  | The Bank prepares guidelines that show employees procedures for implementing business.<br>يعد البنك أدلة إرشادية تبين للموظفين اجراءات تنفيذ الأعمال   |              |         |                             |                 |                   |           |                         |
| 46  | The board of Directors gives advice and offers suggestions to the management staff on issues related to the project affairs<br>يقدم مجلس الإدارة الاقتراحات لموظفي الإدارة بشأن القضايا المتعلقة بشؤون المشروع   |              |         |                             |                 |                   |           |                         |
| 47  | The board of directors is keen on reviewing how the project resources are being used by the various departments .<br>يحرص مجلس الإدارة على مراجعة كيفية استخدام موارد المشروع من قبل الإدارات المختلفة   |              |         |                             |                 |                   |           |                         |
| 48  | The Bank adopts flexible administrative accountability mechanisms.<br>يعتمد البنك آليات مساءلة إدارية تتسم بالمرونة  |              |         |                             |                 |                   |           |                         |
| 49  | The Bank operates according to administrative accountability mechanisms declared to all employees.<br>يعمل البنك وفق آليات مساءلة إدارية معلنة لجميع الموظفين.   |              |         |                             |                 |                   |           |                         |
| 50  | Board members of the bank have the combination of skills (fundraising, management, legal, financial, marketing etc) necessary to do their work<br>يتمتع أعضاء مجلس إدارة البنك بمجموعة من المهارات (جمع الأموال ، والإدارة ، والقانونية ، والمالية ، والتسويق ، إلخ) اللازمة للقيام بعملهم |              |         |                             |                 |                   |           |                         |