

## The Role of Human Resource Information System in Achieving Organizational Excellence: A Study in Sulaimaniya Private Hospitals

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### Abstract:

In highly constant requirement for development competitive environments, there is a need for more comprehensive approaches to achieve sustainable success. This referred on the one hand to the need for an increased participation in the process for change and, on the other, to a more intensive discussion on which method of work organization might be the most productive. Therefore, more holistic concepts are needed in terms of the relationship between human resource management and organizational excellences. Based on the above, this study came to investigate both relationships and impacts of human resource management and organizational excellence among staff in selected private hospitals in the Kurdistan Region Iraq. Methodologically, the quantitative method for data collection was chosen by using a questionnaire survey for sample of 35 respondents. Findings of the study described in a broader context the relationship between human resource management organizational excellence and providing continual learning opportunities are found to have a greater impact on employees' welfare and increased efficiency of hospital staff in line with contemporary technological development. Based on findings, the study recommended hospitals management to necessity available the HRIS effectively if they wanted to adapt changes more rapidly and to decision-making needs and also if they wanted to enable business planning to be combined with excellence for companies.

**Keywords:** human resource information system dimensions, Organizational Excellence, staff, teamwork, training

### الملخص:

في البيئات المتغيرة من حيث الأنفاق والاحتياجات ، تعد المنافسة مطلباً ثابتاً للتنمية ؛ لذلك ، هناك حاجة إلى نهج أكثر شمولاً لتحقيق النجاح المستدام. يشير هذا من ناحية إلى الحاجة إلى زيادة المشاركة في عملية التغيير، ومن ناحية أخرى، إلى مناقشة أكثر كثافة حول طريقة تنظيم العمل التي قد تكون الأكثر إنتاجية. لذلك ، هناك حاجة إلى مفاهيم أكثر شمولية من حيث العلاقة بين إدارة الموارد البشرية والتميز التنظيمي. بناءً على ما سبق، جاءت هذه الدراسة للتحقيق في كل من العلاقات والتأثيرات لمجموعة أبعاد نظام معلومات الموارد البشرية والتميز التنظيمي في المستشفيات الخاصة المختارة في إقليم كردستان العراق. من الناحية المنهجية ، تم اختيار الطريقة الكمية لجمع البيانات باستخدام استبيان استقصائي لعينة من 35 متسبيباً. وصفت نتائج الدراسة في سياق أوسع أن أبعاد نظام معلومات الموارد البشرية، ولا سيما عملية تخطيط الموارد البشرية والتدريب والتطوير تساعد بشكل كبير في تحقيق التميز التنظيمي في منظمات الأعمال من حيث تسهيل رعاية العمال بشكل أفضل وضمان تقديم أفضل الخدمات في وقت مناسب. بناءً على النتائج ، أوصت الدراسة إدارة منظمات الأعمال من أجل النجاح في تعزيز التميز المؤسسي ككل، يجب أن تولي اهتماماً كبيراً بنظام معلومات الموارد البشرية ومنحهم الأولوية كمركز تكفلة حيوى للغاية لتحقيق التميز في منظماتهم.

**الكلمات المفتاحية:** نظام معلومات الموارد البشرية، الامتيازات المنظمة، الموظفين، الفرق العمل، التدريب .

پوخته :

لهم ژینگانهدا که ململانی زوریان تیدایه، پیشبرکن پیویستیمکی گرنگه بتو گمشپیدان. هاوکات پیویستی به رینگهی زیاتر همه به گمیشن به سمرکهون. لهایهک نمه دهگهریتمه بتو پیویستی زیاتری بهشداری کردن له پرسهی گورانکاریدا، لهایهکی ترمه لوانهیه زور گفوگوکردن لسمر تیوری کاری ریکخراوهی زور بمرهمداریت. هبیوه چهمهکه بنهرهتیمکان پیویستیمکی گرنگن لبرووی پهیوندی نیوان بمریوهردنی سمرچاوه مروییمکان و کارامهی ریکخراوهی. لبهرنهو نامانجی نهم تویزینهومه برتیی به له لیکولینهه بله پهیوندی و کاریگریهکانی بمریوهردنی سمرچاوه مروییمکان و گرنگی کاری ریکخراوهی لعناؤ کومهیک کارمهندانی نهخوشانه تایمیهکانی همریمی کوردستانی عیراق. لبرووی میتودیمه، میتودی چهندیتی بتو کوکردنمهوی زانیاریههکان دستنیشانکراوه به دابهشکردنی ۳۵ فورمی راپرسی بمسمر بهشداریواندا. له باریکی فراوانتردا دمرنهجامی تویزینهومه که درمدخت که پهیوندی نیوان بمریوهردنی سمرچاوه مروییمکان و گرنگی کاری ریکخراوهی و دستهبهکردنی همی بمردوامی فیرکردن کاریگری زیاتری لسمر کارمهندانی نهخوشانه و زیادکردنی تواناؤ کارامییان همه بههی پیشکهونتی تهکنلوجیای هاوچرخ. بهپشتیهستن بهم دمرنهجامانه، به شیوههکی کاریگر تویزینهومه که پیشنهیازی کردووه کارگیری نهخوشانهکان پیویسته سمرچاوه مروییمکان و زانیاریهه سیستمیمیهکان بهدهستبخمن، گمر بیانهوتی بهزرووی خویان بگونجین اهگمل گورانکاریههکان و پیویستی برباردان و همرووهها گمر بیانهوتی پلانی کار هاوبهش یهکخمن بتو کومپانیاکان. کلیلی و شهکان: سمرچاوه مروییمکان، و گرنگی کاری ریکخراوهی، کارمهندان، کارکردن به کوممل، راهینان.

## 1. Introduction

The dramatic change in the market scenario involves a rapid transformation of the organization's vision, mission, core values, core competence, management style, policy environment, management system, processes and renewal method. HR policy may play a major role in helping companies achieve change (Asgar, 2015). Human resource management (HRM) involves the managing of decisions and practices which will have a direct effect on the functionality of the human resources system (HRS) inside the organization, as well as insure that it is improved and maintained for the purpose of promoting and developing organization's vision, mission and strategic plans and objectives (Bratton & Gold, 2017). HRM is viewed to be what makes up most extreme support of the customer and greatest inspiration to the HR staff which flows around verifying, keeping-up and building-up viable work limits, and to stay alert in the market in both short and long run (Nelli & Mainela, 2018).

Thus, with the increasing effect of globalization and technology, organizations have started to use information systems in various functions and departments in the last decades. (HRM) is one of the departments that mostly use management information systems (Bal et al., 2012). Human Resources Units in organizations now place much emphasis on sharing information, especially ones that affect the workforce (Troszani et al., 2011). As a result, some organizations deem it fit to employ (HRIS) in their transactions (Lederer, 1984). Human Resource Information System (HRIS) is a computer-based system that is used to manage the administration of HR processes and procedures. Its purpose is to become more efficient in providing better information for decision making (Armstrong & Baron, 2002). According to Kumar (2012), to meet the competition in the global market, firms need to balance their available resources (human and capital) to achieve the desired profitability and survival. It is believed that management of human resources is the most important function for every organization that wants to have a competitive edge over its competitors because system in organizations are formed and ran by humans toward achieving desired organizational excellence (Amuna et al., 2017).

Given the importance of the above, the main question of the current study came to realize and understand the truth of the extent of achieving organizational excellence by the role that can be played the set of the (HRIS) dimensions in business organizations. Hence, this study showed through its results in the broader context of the relationship between human resource management organizational excellence and providing continual learning opportunities are found to have a greater impact on employees' welfare and increased efficiency of hospital staff in line with contemporary technological development. Thus, the originality of this paper enables in introducing a new contribution in terms of providing sponsoring data and information to a large extent in filling the gap in the literature regarding the important role that can be played by the set of (HRIS) dimensions in achieving organizational excellence at the business organizations. Therefore, the focus of the current study was on the private hospitals in the Kurdistan Region of Iraq. The following part of this paper proceeds to present the research problem, the research objectives along with the research significance.

### **1.1. Research Problem**

Human resource is the real basis for any business organization in addition to other resources. The worker's skills and the desire to work is the decisive factor in achieving the productive efficiency of the organization (DeCenzo et al., 2016). The problem of absence and lack of clear strategies in human resources management are common administrative problems (Robbins et al., 2011). While many governmental or non-governmental organizations require the administrative organization to take care and harness all the possibilities to build the foundations of the practical strategies assigned to the modern administrative foundations to achieve institutional excellence through the establishment of human resources management systems.

Despite the importance of the above, in the Kurdistan region of Iraq, ambiguity still surrounds about the extent of the role that can be played the set of the (HRMS) dimensions in achieving organizational excellence, and their precedents in preference are still shrouded in ambiguity. Therefore, the problem of the study came to search for the role of these dimensions towards achieving organizational excellence in organizations of the Kurdistan region of Iraq in general and in the city of Sulaymaniyah in particular? Within this framework, the following main questions have been crystallized:

1. What is the quality and level of correlation between human resources information system dimensions and organizational institutional excellence in the studied organizations?
2. What is the nature and level of the impact of human resources information system dimensions and organizational excellence in the studied organizations?
3. What is the most important dimension of human resources information system and has more influence than other elements on achieving organizational excellence?

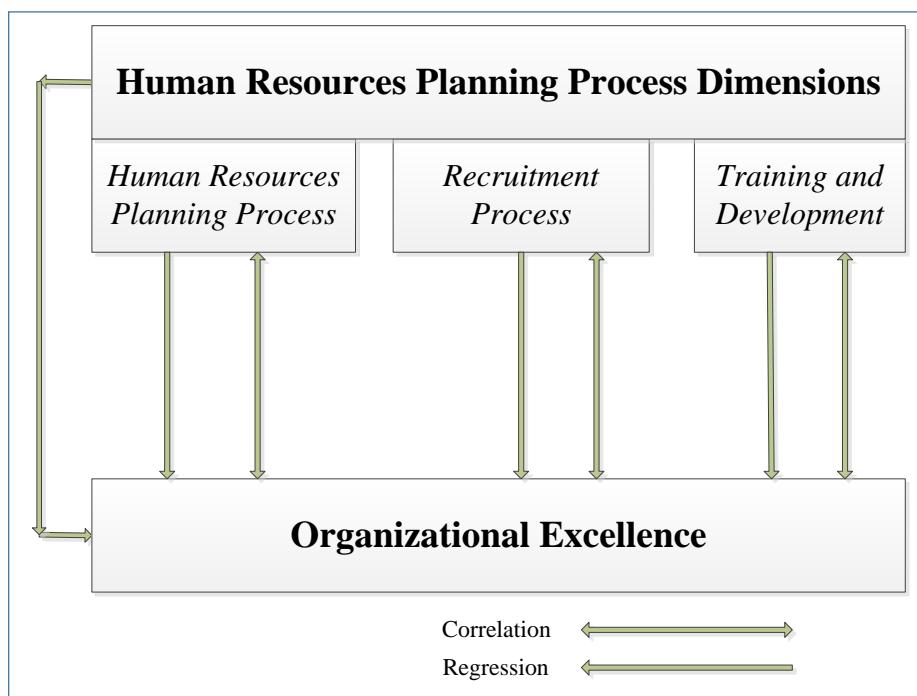
## 1.2. Research Objectives

The aim of this study is to a deeper understanding the role HRIS play in achieving organizational excellence within business organizations. The objectives of the study are:

1. To determine the nature of the relationship between the dimensions of human resources information system singly and organizational excellence in the studied organizations.
2. To study the impact level of the composite variable of human resource information system dimensions on achieving organizational excellence in organizations under study.
3. To study the impact level of the dimensions of human resources information system singly on achieving organizational excellence in the studied organizations.

## 1.3. Research model

The nature of this paper is descriptive and aiming to discover the role of the set of human resources information system dimensions in achieving organizational excellence in private hospitals field. This is because, to date, this matter has received scant attention in the research literature. In light of the above mentioned, the research model is as follows:



**Figure1.** Research Model

Source: Organized by the researcher, adapted from Magutu & Marika (2018)

## 1.4. Research Hypotheses

**H1:** There is a significant correlation between the human resources information system dimensions singly and organizational excellence in the studied organizations.

**H2:** There is a significant impact to the human resources information system dimensions combined on achieving organizational excellence in the studied organizations.

**H3:** There is a significant impact to the human resources planning process dimension on achieving organizational excellence in the studied organizations.

**H4:** There is a significant impact to the recruitment process dimension on achieving organizational excellence in the studied organizations.

**H5:** There is a significant impact to the training and development dimension on achieving organizational excellence in the studied organizations.

## 1.1. Research Significance

The importance of the study is as follows:

**Academic importance:** The current research is important because of the importance of its variables, where it is dealing with modern topics such as the human resources information systems and institutional excellence, which are considered the topics that have received much attention in the management literature. Consequently, the current research tries to clarify the importance of human resource information systems and institutional excellence, this is in order to chart a clear path for the organizations surveyed in this area towards building strategies sponsor to achieve institutional excellence compared to other competing organizations, this is through adopting a set of dimensions of human resources information systems that addressed the current study, which in turn, can achieve the above.

**Field importance:** It lies in raising the motivations of the organizations to study and address such vital and modern issues and to benefit from them in developing their work and improving their performance compared to their competitors. In addition to identifying the main and subsidiary dimensions of the study variables, it constitutes an important field for developing knowledge horizons in this field.

## 2. Literature Review

(HRIS) is defined as a software or online solution that is used for data entry, data tracking, and data management of all human resources operations of an organization. It is thus an accessible, actionable database that enables the smooth operation of all HR systems hosted either on the organization's server, the cloud, or on that of an outsourced vendor (Kavanagh & Johnson, 2017). An HRIS is often referred to human resources management system, since it aids in effective human resource management and planning toward achieving organizational excellence (Magutu & Marika, 2018). The following is a detailed explanation of the most important concepts related to Human resource information system and its dimensions along with the concept of organizational excellence.

## 2.1. Human Resource Information System (HRIS)

HRIS is an information system, which is regularly used to follow information identified with HR. It is one of the Management Information Systems. Numerous progressions are made to demonstrate that employee data were stored before compared with the frameworks utilized in the organization (Dulebohn & Johnson, 2013). HRIS orders data like representative subtleties, pay move, benefits, usage following and evaluation and so forth, technological advancement acquired a ton of changes HR Management. The storage of data was presently changed from manual records and books to PC hard drives and attractive tapes. Storage of data became easier and a lot of manual work was extracted (Provost & Fawcett, 2013). HR Management was later observed as a key structure stage which managed the most vital asset of any organization. Hence it came to be known as Strategic HR Management (SHRM). The HR Management had a total makeover when HR Information System was brought into the performance Gupta, B. (2013). The following is more details about the dimensions related to the human resources information system that were dealt with in the current study.

### 2.1.1. Human Resource Planning Process (HRPP)

Human resource planning is the process whereby organizations determine the staffing support they will need to meet business needs and customer demands. There are a variety of considerations that impact this planning, including impending retirements and transitions, the availability of employees with certain skills sets and changes in the environment that may require training for existing employees (Berman, et al., 2019). As well as, Egina (2015) referred that human resource planning is the continuous process of systematic planning ahead to achieve optimum use of an organization's most valuable asset - quality employees. Human resources planning ensure the best fit between employees and jobs while avoiding manpower shortages or surpluses.

There are four key steps to the HRP process. They include analyzing present labor supply, forecasting labor demand, balancing projected labor demand with supply, and supporting organizational goals. HRP is an important investment for any business as it allows companies to remain both productive and profitable (Berman et al., 2019). To measure a firm's human resource planning process, researchers such as Nkomo (2020); Ngai (2008); Al-Mashari (2003) evaluated five phases of human resource planning: (1) Analyzing the external environment of human resource management. (2) Linking HR Process to strategic business planning. (3) Analyzing human resource demand & supply (4) achieve, analyzing, and developing functional area of human resource strategies. (5) Evaluating and monitoring planning result. The purpose of the HRPP is to: (1) establish a team-based organization structure placed on the regenerate processes, and (2) predict labor power requirements for a team-based organization. The exemplary HRPP achieves the study purposes by mapping a company's processes into a simulation system (Cheng et al., 2005).

### **2.1.2. Recruitment Process**

Recruitment is a process of finding and attracting the potential resources for filling up the vacant positions in an organization. It sources candidates with the abilities and attitude, which are required for achieving the objectives of an organization (Ekwoaba et al., 2015). The recruitment process is a process of identifying the jobs vacancy, analyzing the job requirements, reviewing applications, screening, shortlisting and selecting the right candidate (Hmoud & Laszlo, 2019). Nanjiba (2017) pointed out that the recruitment process is the first step in creating a powerful resource base. The process undergoes a systematic procedure starting from sourcing the resources to arranging and conducting interviews and finally selecting the right candidates. To increase the efficiency of hiring, it is recommended that the HR team of an organization follows the five best practices, which are represented (recruitment planning, recruitment strategy, searching the right candidates, screening / shortlisting and evaluation and control). These five practices ensure successful recruitment without any interruptions. In addition, these practices also ensure consistency and compliance in the recruitment process (Maier et al., 2013).

### **2.1.3. Training and Development**

Training and Development is one of the main functions of the human resource management department. Training refers to a systematic setup where employees are instructed and taught matters of technical knowledge related to their jobs. It focuses on teaching employees how to use particular machines or how to do specific tasks to increase efficiency (Noe & Kodwani, 2018). Training and development programmes are designing according to the requirements of the organization, the type and skills of employees being trained, the end goals of the training and the job profile of the employees. These programmes are generally classified into two types: (i) on job programmes, and (ii) off the job programmes (Elnaga & Imran, 2013). Furthermore, Noe & Kodwani (2018) confirmed that for companies to keep improving, it is important for organizations to have continuous training and development programs for their employees. Competition and the business environment keep changing, and hence it is critical to keep learning and pick up new skills. Also, they referred that the importance of training and development is as follows: 1) optimum utilization of human resources, 2) development of skills like time management, leadership, team management etc, 3) to increase the productivity and enhance employee motivation, 4) to provide the zeal of team spirit, 5) for improvement of organization culture, 6) to improve quality, safety, 7) to increase profitability.

## **2.2. Organizational Excellence**

Organizations in today's ever-changing and global business environment need to focus on creating new approaches to their development. Such approaches should provide confidence in the organization's ability to achieve long-term and sustained success (Nenadál et al., 2018). So-called "organization excellence" represents one of the most recognized concepts which can assure such ability. The organizational excellence ensures all organizational systems are aligned and functioning cohesively together (Oakland, 2001).

Organizational Excellence is one of the concepts that organizational and work systems have searched it continuously and have stated it differently in each stage of history (Shirvani & Javad Iranban, 2014). Organizational Excellence can be defined as the growth and promotion of

organization in all its different aspects in the manner that by desirable satisfaction of all organization stakeholders and establishing equilibrium among them increases the probability of organization success in long-term (Muralidharan, 2015). Excellence model is a managerial structure that causes progress and improvement by relying on basic principles and concepts and paying attention to basic criteria of quality management and self-appraisal system. Excellence model is an instrument for the measurement of the degree of systems established in the organization and is a self-assessment and guide that determines and identify the line of managers' activities for performance improvement (Cheng et al., 2014).

Paying attention to human force is one of the effective instruments to achieve Organizational Excellence. An organization must have an excellent human force to help it achieve its goals and achieve success. Human resource empowerment and productivity as a strategic instrument for gaining competitive advantages is one of the principles and important plans in organizations (Shirvani & Javad Iranban, 2014). Managers of organizations perceived that dealing with human resources as the main capital of an organization is one of the most important functions of them so that having qualified human resources with proportional characteristics, abilities and skills to nowadays organizations' needs can form their organization competitive advantages (Dussault & Dubois, 2003).

### **3. Research Methodology**

The research adopted the descriptive-analytical approach, which is characterized by combining the description and analysis of the phenomenon in order to draw the results. It focuses on the survey of opinions based on the questionnaire. Therefore, it depends on diagnosing the situation and analyzing it to draw conclusions and monitor the basic indicators.

#### **3.1. Research Population**

Determining the location of the research is very important and to test the hypotheses of research in practice; therefore, the researchers chose the three private hospitals in the city of Sulaimaniya, which is a field of human development in Kurdistan region. It should be noted that the trademarks of the hospitals are undisclosed as the HR department recommended. The participants were categorized on the basis of their educational background. Thus, the research strategy largely helps to organize the operation variables, collect relevant data and analyze them. As well as, a solution can be established to the main problem areas which the research uncovers (Sekaran & Bougie, 2016).

As indicated above, the current paper aimed to examine the real role that can be played by the set of human resources information system dimensions in achieving organizational excellence. To that end, the methodological approach taken in this study is a quantitative method was used to investigate the phenomena in which the survey questionnaire was selected to collect data. To ensure reaching robust data and reliable results, the researcher tested the questionnaire via a pilot study which plays a greater role to check the validity and reliability of the survey. The following is a detailed explanation of the quantitative data collection methods and procedure.

### **3.2. Quantitative Data Collection Methods**

According to Sekaran & Bougie (2016), having a proper research design will assist the researcher to operationalize variables and collect robust data and consequently gain reliable answers that provide reasonable solutions to the problems the research has proposed. Therefore, the design of the questionnaire was self-administered. The questionnaire comprised of three sections. Section one comprised of items human resource information system dimensions, which are: human resource planning process; recruitment process; training and development. There were fifteen-items measuring the most important concepts related to these dimensions. Participants were asked to respond using a 5-point Likert scale using the level of agreement or disagreement. The items measuring the four dimensions have been taken from the studies of Bal et al. (2012), Bamberger (2014), Kavanagh & Johnson (2017) and Magutu & Marika (2018). The second section of the questionnaire elicited information on measuring the organizational excellence in terms of the systematic planning, coordinating and systematic and scheduled directing of all organizational activities and other objects that can reflect the opinions of the workers regarding the organizational excellence in their hospitals. Ten items were used to measure the dimensions of organizational excellence, which were also categorized on a 5-point Likert scale on the basis of measuring the proportions of agreement or disagreement. The items of these dimensions were found in the studies of Shirvani & Javad Iranban (2014), Muralidharan (2015), Nelli & Mainela (2018) and Nenadál et al. (2018). The third section of the survey was devoted to personal information (gender, age, number of years of service, academic achievement, field of specialization, number of training courses in the field of hospitals in which they participated). In the survey, a special checklist was used to confirm whether the questionnaire embraces all relevant parts like educational, environmental, organizational, technical aspects. This is regarded as a significant stage as it ensures the questionnaire reaches the aims of the study and to ensure gaining objective. To ensure that the aim of this study is accurately achieved and to obtain robust data and reliable results, the several procedures were performed to test the questionnaire. This was done to ensure the questionnaire covers all aspects of the phenomena investigated (e.g. organizational, educational, technical, environmental aspects). A detailed explanation of the questionnaire survey procedures is given in the following paragraph.

### **3.3. Procedures of Questionnaire Survey**

Several characteristics must be met when a questionnaire is designed. For instance, questions must be short, relevant and easy to understand by respondents. This is to ensure that participants interpret the questions properly (Taber, 2018). Furthermore, it is important to extract questions from pre-test sources that were previously checked by academics and practitioners in the field of human resource information systems and organizational excellence. The contents of the question must be comprehensible and built based on appropriate theory and literature. To avoid confining respondents, given open-ended questions play a significant role. This is to confirm that the questions are interpreted objectively and efficiently by the respondents so as to arrive to a precise interpretation of the given questions. The procedures used to collect data must be written in detail to ensure that the process is replicated and that good reliability is enabled. The following is a brief description of the procedures of the questionnaire which is adopted in this study.

First, the information required carefully considered the target respondents, and then decisions on the content of the questionnaire were made. Subsequently, the questionnaire wording and its format were developed and, most importantly, the length of the questionnaire was checked. The questionnaire was written in English. Before launching the questionnaire, it was pre-tested by disclosed to other relevant checkers (e.g. the group of experts at the University of Sulaymaniyah and Cihan University / Sulaymaniyah). Based on the recommendation of abovementioned people, necessary adjustments were made. Before sending to the target respondents, the questionnaire was translated into Kurdish, which is the dominant language in the study area, as a precaution against the language barrier. The back-translations were carefully compared against the initial transcripts in order to avoid any discrepancies and also to ensure credibility and authenticity. Furthermore, a pilot study was conducted on the Kurdish version of the questionnaire, by sending 30 copies with a cover letter to one target hospital to ensure their reliability through the Cronbach alph reliability test; based on this, the questions of the questionnaire was reviewed and re-checked.

Subsequently, a final version of the questionnaire was made and distributed to the respondents through the senior managers of the chosen hospitals. It should be noted that having and building a constructive relationship with senior managers at the hospitals made the process of the data collection quicker, easier and efficient. Thus, the researchers adopted the method of stratified random sampling which is one of the statistical methods used in selecting the most appropriate and accurate research sample in the representation of society. In total (60) questionnaires were distributed for fear of the possibility of a low recovery rate or the presence of questionnaires that were not valid for unloading. The number of questionnaires retrieved and valid for statistical analysis was a (35) questionnaire. Thus, data processing of these questionnaires were done using SPSS (Version 21). As for the techniques that were used in analyzing the data, they are description analysis of the demographic characteristics of the participants and Pearson correlation to show the significant association between study variables; as well as, a linear and multiple regression analysis were adopted in order to investigate the extent of the influence of the independent variables on the dependent variable in the current study. These techniques were explained in-depth details in the following paragraphs.

### **3.4. Reliability and Validity of Data Collection Methods**

As we mentioned earlier, it was necessary that the instrument (questionnaire) should be reliable so that it could be used by other researchers in different contexts and settings. For this purpose, Taber (2018); Andrade et al., (2017) highlighted that instrument reliability could be checked through Cronbach's Alpha reliability test. Thus, to ascertain the reliability of the survey questionnaire of this study, Cronbach's Alpha was calculated depending on a pilot study data that was carried out on a sample of 30 respondents. The Cronbach's Alpha for the instrument was found to be above 0.60, confirming the reliability of the instrument (Taber, 2018).

In order to increase the validity of data and research findings, the experienced and knowledgeable persons have been involved in order to verify the validity of the content of the questions of the survey instrument (questionnaire) and make it more suitable for final data collection. Furthermore, to validate the survey questionnaire, the researcher used factor analysis as a principal component analysis approach to validate the items and the factors related to the variables of the study. Finally, this study was very focused on the problem formulation and all statements presented in the study were supported

by a theoretical foundation and retrieved through a literature review. This rigorous reviewing of literature enhances the reliability and validity of the findings (Sekaran & Bougie, 2016).

#### 4. Results and Discussion

This section below of this study moves on to discuss in greater detail the results of the survey questionnaire and the statistical methods that were used to test the hypotheses. This was done to gain more knowledge and in-depth information about the impact that can the set of human resources information system dimensions occur in achieving organizational excellence at three private hospitals in Kurdistan region / Iraq.

##### 4.1. Profile of Respondents

This section represents the respondents' profiles. Simple frequency counts were employed to allocate the respondents based on their personal characteristics: gender, age, number of years of service, academic achievement, field of specialization, number of training courses in the field of hospitals in which they participated. The profile of respondents is shown in Table 1.

**Table 1.** Respondents information (N = 35)

Respondents Background									
Gender		Age		Service Years		Educational Attainment		Number of Training Courses	
Items	N (%)	Items	N (%)	Items	N (%)	Items	N (%)	Items	N (%)
Female	15 (.428)	30 years and less	6 (17.1)	less than 1 year	9 (25.7)	High School Graduate	11(31.4)	Did not participate	12(34.2)
Male	20 (.572)	31-40 Years	8 (22.9)	1 – 5 years	9 (25.7)	Diploma Degree	11(31.4)	Participated in one training course	8(22.9)
		41-50 Years	15 (42.9)	6–10 years	10 (28.6)	Bachelor Degree	7(20.0)	Participated in two training courses	5(14.3)
		51-60 years	6 (17.1)	11 – More	7 (20.0)	Advanced Degree	6(17.2)	Participated in three training courses or more	10(28.6)

As shown in Table 1, it is noted that the largest percentage of respondents according to the gender variable were males (57.2%), and the females come next at (42.8%). This indicates that the hospitals in question generally depend more on male workers than females; despite the interesting fact that hospital female staff possess greater ability, patience and endurance during the pressure of work.

However, this distribution is a real reflection for the reality of workers in most service sectors in the Kurdistan Region-Iraq. As for age, it is clear from Table 1, that most of the study sample is aged between 41 -50 years old and their percentage is 42.9%, and 22.9% are from people aged 31 to 40 years, and that 17.1% are from people of age (less than 30 years and 51 A year or more). For the number of years of service, the Table indicates that the majority of the respondents have 6 –10 years of experience (28.6) and it is a high percentage and it is useful for the results of the current study; while that less than 1 year of experience and from 1 to 5 years reached (25.7%); this was followed by respondents who were employed between 11 – more (20.0%); thus, these findings give an indication that they have sufficient knowledge of the nature of the work environment and its suitability. The distribution of the employees' educational backgrounds indicated that the majority (31.4%) had received a high school graduate and diploma degree; 20.0% held a bachelor degree and 17.2% held an advanced degree of the education. The results show that a minority of employees own high educational level toward mastering the human resource information system dimensions to achieving organizational excellence in their hospitals. As for the number of training course, the Table shows that 34.2% of the study sample who did not participate in any training courses, and 28.6% of the study sample of people participated in three courses or more, 22.9% of employees participated in one training course, while 14.3% of them participated in two training courses.

#### **4.2. Descriptive Statistics for Items of Questionnaire**

Descriptive statistics provide information about the trend of the data. They are useful in evaluating the level of existence of various variables under study. Thus, this section deals with the presentation and analysis of the data presented by the questionnaire forms in respect of human resource information system dimensions and organizational excellence of the study sample. For this purpose, the researcher used the five-dimensional Likert-scale, and the table of repetitive distributions of the study variables was used. In the following sections more details about the descriptive analysis data for the dimensions of human resources information system and organizational excellence separately.

##### **4.2.1. Descriptive Statistics for Human Resources Planning Process Dimension**

This section reviews through the Table (2) the results of the statistical analysis for the responses of the study population in terms of arithmetic mean, standard deviations, relative importance and direction for the human resources planning process dimension.

**Table 2.** Summary of Descriptive Statistics of Human Resources Planning Process Dimension

A sub-system for the HR planning process	Relative importance									
	Direction	High	High	High	High	High	High	High	High	High
Strongly Agree	Agree	Not sure	Disagree	Strongly Disagree	Arithmetic mean	Standard deviation	Coefficient of	Relative importance	Direction	
The organization relies on the outputs of HR planning systems to make planning decisions.	31.4 %	60.0 %	2.9%	5.7%	0.0%	4.17	0.75	17.91 %	83.43 %	High
The management of the organization is concerned with providing the information necessary for proper and appropriate planning	20.0 %	60.0 %	20.0 %	0.0%	0.0%	4.00	0.64	16.04 %	80.00 %	High
The organization's management is concerned with the quality of the information in terms of its accuracy and novelty	48.6 %	45.7 %	2.9%	0.0%	2.9%	4.37	0.81	18.47 %	87.43 %	High
The management of the organization is concerned with relying on modern technology to build an appropriate human resource planning system	57.1 %	25.7 %	11.4 %	2.9%	2.9%	4.31	0.99	23.02 %	86.29 %	High
There is sufficient information to prepare the appropriate plan to lead the organization to organizational excellence	31.4 %	51.4 %	14.3 %	0.0%	2.9%	4.09	0.85	20.88 %	81.71 %	High
		The mean and the standard deviation				4.19	0.81			

Table (2) shows that the arithmetic averages of the human resources planning process dimension ranged between (4.00-4.37), compared to the general arithmetic average of it (4.19). As well as, the standard deviation the human resources planning process dimension ranged between (0.64-0.99), compared to the general standard deviation of it of (0.81), which indicates that the dispersion between the responses of the sample members was relatively little, meaning that the sample members agreed on most of this dimension paragraphs. Where the paragraph that states that "The organization's management is concerned with the quality of the information in terms of its accuracy and novelty" came first with an arithmetic average (4.37) and a standard deviation of (0.81) compared to the general arithmetic average and the general standard deviation. Whereas the paragraph which states "The management of the organization is concerned with providing the information necessary for proper and appropriate planning" came in the last rank with an arithmetic average (4.00) and a standard deviation of (0.64) compared to the general arithmetic average and the general standard deviation.

#### 4.2.2. Descriptive Statistics for Recruitment Process Dimension

This section is concerned through Table (3) with display the results of the statistical analysis for the responses of the study population in terms of arithmetic mean, standard deviations, relative importance and direction for the recruitment process dimension.

**Table 3.** Summary of Descriptive Statistics of Recruitment Process Dimension

Sub-system for the recruitment and recruitment process	Strongly Agree	Agree	Not sure	Disagree	Strongly Disagree	Arithmeti c mean	Standard deviation	Relative importanc e	Direction
Organization management depends on the foundations, methods and scientific means for selecting and employing employees	40.0 %	40.0 %	20.0 %	0.0%	0.0%	4.20	0.76	18.08 %	84.00 %
The organization works to search and attract those with distinguished capabilities to achieve institutional excellence	37.1 %	37.1 %	22.9 %	0.0%	2.9%	4.06	0.94	23.11 %	81.14 %
The organization's management decision is based on interviews and scientific tests to distinguish individuals (appropriate and inappropriate for work).	31.4 %	28.6 %	17.1 %	17.1 %	5.7%	3.63	1.26	34.79 %	72.57 %
The organization's administration works to collect sufficient information and analysis about the people who were chosen to work	48.6 %	25.7 %	17.1 %	2.9%	5.7%	4.09	1.15	28.08 %	81.71 %
The organization works on the principle of (the right person in the right place)	51.4 %	25.7 %	2.9%	14.3 %	5.7%	4.03	1.29	32.13 %	80.57 %
						4.00	1.08		

Table (3) displays that the arithmetic means for the recruitment process dimension ranged between 3.63-4.20; this is compared to the general arithmetic average of it of (4.00). While, the standard deviation for the recruitment process dimension ranged between (0.76 - 1.29), compared to the general standard deviation of it of (1.08), which indicates that the dispersion between the answers of the members of the sample was relatively little, meaning that the members of the sample were agreed on most of the paragraphs of this dimension. Thus, the paragraph that states that "the management of the organization depends on the foundations, methods and scientific means for selecting and employing employees" came first with an arithmetic average (4.20) and a standard deviation of (0.76) compared to the general arithmetic average and the general standard deviation. On the other hand,

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the paragraph which says "The organization's administration is based on interviews and scientific tests for the excellence of individuals (appropriate and inappropriate for work)" got the last rank with an average (3.63) and a standard deviation of (1.26) compared to the general average and the general standard deviation.

#### 4.2.3. Descriptive Statistics for Training and Development Dimension

This section through Table (4) shows the results of the statistical analysis for the responses of the study population in terms of arithmetic mean, standard deviations, relative importance and direction for the training and development dimension.

**Table 4.** Summary of Descriptive Statistics of Training and Development Dimension

A subsystem for training and development	Direction	High	High	High	High	High	High	High	High
	Relative importance								
	Coefficient of variation								
The management of the organization is concerned with the participation of individuals working in various and continuous training courses	Arithmetic mean	34.3 %	48.6%	11.4 %	5.7%	0.0%	4.1 1	0.8 3	20.23 %
There is a special consideration by senior management to open skills development training courses	Standard deviation	31.4 %	48.6%	20.0 %	0.0%	0.0%	4.1 1	0.7 2	17.46 %
The organization's administration allocates the appropriate amounts in the company's budget for skills development	Standard deviation	31.4 %	42.9%	14.3 %	11.4 %	0.0%	3.9 4	0.9 7	24.56 %
It works to find a periodic system to open various training courses in the organization	Standard deviation	28.6 %	51.4%	17.1 %	2.9%	0.0%	4.0 6	0.7 6	18.85 %
The organization's management works with the help of famous trainers in the field of training and development	Standard deviation	25.7 %	54.3%	17.1 %	2.9%	0.0%	4.0 3	0.7 5	18.54 %
							4.0 5	0.8 1	

Table (4) shows the results of the training and development dimension, where its arithmetic averages ranged among (3.94 - 4.11) compared to the general arithmetic average of it of (4.05). While the standard deviation for it ranged between (0.72-0.83), compared to the general standard deviation of it that reached (0.81), which indicates that the dispersion between the responses of the sample members was relatively little that is, the sample members were agreed on most of this dimension paragraphs. Where the paragraph that states that "there is a special consideration by the senior management to open training courses for skills development" came first with an arithmetic average

(4.11) and a standard deviation of (0.72) compared to the general arithmetic average and the general standard deviation. Whereas the paragraph which says "The organization administration allocates the appropriate amounts in the company's budget for skills development" has got the lowest arithmetic average of (3.94) and a standard deviation of (0.79); however, it seems reasonably good compared to the general arithmetic average and the general standard deviation.

#### 4.2.4. Descriptive Statistics for Organizational Excellence

This section is concerned through Table (5) with display the results of the statistical analysis for the responses of the study population in terms of arithmetic mean, standard deviations, relative importance and direction for the organizational excellence.

**Table 5.** Summary of Descriptive Statistics of Organizational Excellence

A subsystem for training and development	Strongly Agree	Agree	Not sure	Disagree	Strongly Disagree	Arithmetic mean	Standard deviation	Coefficient of variation	Relative importance	Direction
The management of the organization pays great attention to the organization's distinction among similar organizations	42.9 %	42.9 %	14.3 %	0.0%	0.0%	4.29	0.71	16.57 %		High
The organization is led by leadership and governing leaders in order to reach institutional excellence	28.6 %	62.9 %	2.9%	0.0%	5.7%	4.09	0.92	22.50 %	85.71 %	High
The management of the organization is concerned with the participation of personnel in training courses to develop their skills	34.3 %	51.4 %	14.3 %	0.0%	0.0%	4.20	0.68	16.13 %	81.71 %	High
The organization's leadership is concerned with removing obstacles to the growth and prosperity of the organization's reputation	31.4 %	45.7 %	22.9 %	0.0%	0.0%	4.09	0.74	18.17 %	84.00 %	High
The management of the organization is concerned with relying on information technology for development and leadership in the market	28.6 %	60.0 %	11.4 %	0.0%	0.0%	4.17	0.62	14.81 %	81.71 %	High
Reputation, service and customer satisfaction are among the primary tasks of the organization	48.6 %	40.0 %	11.4 %	0.0%	0.0%	4.37	0.69	15.78 %	83.43 %	High

The organization serves its customers with appropriate services in terms of price and quality	40.0 %	45.7 %	11.4 %	0.0%	2.9%	4.20	0.87	20.66 %	87.43 %	High
There is great eagerness on the part of the higher management to strengthen relations with the customer accordingly.	42.9 %	54.3 %	2.9%	0.0%	0.0%	4.40	0.55	12.57 %	84.00 %	High
There is a clear vision by senior management to reach and retain institutional excellence	51.4 %	34.3 %	14.3 %	0.0%	0.0%	4.37	0.73	16.72 %	88.00 %	High
There is encouragement and motivation by the organization's management to work in a spirit of teamwork and direct capabilities to achieve institutional excellence	42.9 %	37.1 %	11.4 %	5.7%	2.9%	4.11	1.02	24.85 %	87.43 %	High
						4.23	0.75			

Table (5) Shows that, the arithmetic ranges of organizational excellence between (4.09 - 4.40), compared to the general arithmetic average of organizational excellence of (4.23). As well as, the standard deviation for it ranged between (0.55 - 1.02), compared to the general standard deviation of (0.75), which indicates that the dispersion between the responses of the sample members was relatively little, meaning that the sample members were agreed on most of this dimension paragraphs of the current study. On this basis, the paragraph that states that "there is a great concern by the higher management to strengthen relations with the customer accordingly," came in the first with an arithmetic average (4.40) and a standard deviation of (0.55) compared to the general arithmetic average and the general standard deviation. On the other hand, the paragraph that says: "The organization's leadership is concerned with removing obstacles to the growth and prosperity of the institution's reputation" came as the last rank with an arithmetic average (4.09) and a standard deviation of (0.74) compared to the general arithmetic average and the general standard deviation.

#### 4.3. Pearson Correlation Analysis for Variables

Pearson Correlation was conducted to construct the link between the set of human resource information system dimensions and organizational excellence. Pearson correlation shows the significant association between variables (Sekaran & Bougie, 2016). The correlation findings were pointed out in Table 6.

**Table 6.** Correlation Matrix for Variables of Study

	Human Resources Planning Process	Recruitment Process	Training and Development	Organizational Excellence
Human Resources Planning Process	1			
Recruitment Process	.521**	1		
Training and Development	.565**	.512**	1	
Organizational Excellence	.681**	.535**	.639**	1

\*\*. Correlation is significant at the 0.01 level (2-tailed).

The Pearson correlation coefficient findings in Table 6 illustrate that there is a moderately strong and positive association between the dimensions (human resources planning process, recruitment process and training and development) of the human resource information system and the organizational excellence. Based on this, the following hypothesis is accepted.

**H1:** There is a significant correlation between the human resources information system dimensions singly and organizational excellence in the studied organizations.

As soon as the association was proven between variables, as well after conducting certain assumptions that should be fulfilled before conducting regression analysis, a regression analysis that employed a linear and multiple regression technique was conducted, respectively, in order to gain a better understanding of the impact of human resource information system dimensions on achieving organizational excellence, as well to ensure which dimension of human resource information system is the most persuasive on achieving organizational excellence within designated hospitals under study. The results of the analysis are presented in the following paragraph.

#### 4.4. Regression Analysis for Human Resources Information System and Organizational Excellence

A linear and multiple regression analysis was performed in order to investigate the impact of the dimensions of human resource information system on achieving organizational excellence, as well to ensure which dimension of human resource information system is the most persuasive on achieving organizational excellence within designated hospitals under study. Results of linear and multiple regression analysis are shown in Tables 7 and 8, respectively.

**Table 7.** Linear Regression Analysis for HRIS with OE Model

Model	R	R <sup>2</sup>	Adj. R <sup>2</sup>	F	Sig.	Beta	t	Sig.
1	.767	.588	.446	14.75	0.000			
Intercept						0.456	9.038	.000
OMHE						.407	2.679	.012

Predictors: (Constant), Human Resource Information System (HRIS)

Dependent Variable: Organizational Excellence (OE)

Simple linear regression has been used to test the influence of the composite variable of human resource information system dimensions on achieving organizational excellence as shown in Table 7. The results of the present study displayed that the human resource information system dimensions play an important role in achieving organizational excellence. The results indicated that the human resource information system dimensions as an independent variable have a strong relationship ( $R = 0.767$ ) with the dependent variable of organizational excellence. The findings also showed that the value of R Square here is 0.588. This means that human resource information system dimensions are causing 58.8% variation in organizational excellence. Likewise, the results indicated that the human resource information system dimensions have a significant influence ( $\beta = 0.407$ ,  $p < 0.05$ ) on organizational excellence. This result indicates that the human resource information system dimensions alone will have an influence of 40.7% on organizational excellence. Thus, the regression analysis for the model of human resource information system dimensions - organizational excellence indicates that its results support the second hypothesis; therefore, this hypothesis has been accepted.

**H2:** There is a significant impact to the human resources information system dimensions combined on achieving organizational excellence in the studied organizations.

**Table 8.** Multiple Simultaneous Regression Analysis for Human Resource Information System Dimensions with Organizational Excellence Model

Model	R	R <sup>2</sup>	Adj.R <sup>2</sup>	F	Sig.	β	t	P
	.619	.521	.515	16.231	.000			
Human Resources Planning Process						.681	5.338	.000
Recruitment Process						.535	3.641	.001
Training and Development						.639	4.772	.000

Predictors: (Constant) Human Resources Planning Process, Recruitment Process, Training and Development

Dependent Variable: Organizational Excellence

The multiple regression results indicate that the human resources planning process and training and development are the most influential dimensions respectively on achieving organizational excellence. Likewise, the dimension of the recruitment process came in second place in terms of influencing organizational excellence. the following are more details about the results of these effects.

As for the results of the impact of human resources planning process, the results showed that the human resources planning process has an effect ( $\beta = 0.68$ ,  $p < 0.05$ ) on the issue of achieving organizational excellence. Many researchers have confirmed that the human resources planning process can lead to improving organizational excellence to enhance overall performance efficiency in business organizations by improving the human resource information system, thereby assist to fulfill customer requirements faster (Armstrong & Baron, 2002; Maier et al., 2013; Nanjiba, 2017). Thus, based on the discussion above, the following hypothesis is accepted.

**H3:** There is a significant impact to the human resources planning process dimension on achieving organizational excellence in the studied organizations.

The findings indicate that the dimension of the recruitment process has also impact ( $\beta = 0.535$ ,  $p < 0.05$ ) on achieving organizational excellence, but less compared to the first dimension (human resources planning process) of the human resource information system dimensions. Thus, many researchers such as Hmoud & Laszlo (2019); Nanjiba (2017); Ekwoaba et al. (2015) referred that the recruitment process has a satisfactory role in achieving organizational excellence as it is considered the first step in creating a powerful resource base, and this process undergoes a systematic procedure starting from sourcing the resources to arranging and conducting interviews and finally selecting the right candidates; which that lead to ensure successful recruitment without any interruptions, thereby enhancing the capabilities of employees towards achieving more organizational excellence for their organizations in the business field (Maier et al., 2013). Based on the above explanations, the following hypothesis is accepted.

**H4:** There is a significant impact to the recruitment process dimension on achieving organizational excellence in the studied organizations.

As well as, the results of multiple simultaneous regression displayed that the dimension of training and development has a significant impact ( $\beta = 0.639$ ,  $p < 0.05$ ) on achieving organizational

DOI: <http://dx.doi.org/10.25098/5.1.7>



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excellence, this is through the development of skills like time management, leadership, team management and the optimum utilization of human resources. All this, in turn, lead to increase the productivity and enhance employee motivation, providing the zeal of team spirit, improvement of organization culture, improving quality, safety and increasing profitability, and then towards achieving organizational excellence for the business organizations (Noe & Kodwani, 2018; Jahan & Sabrina, 2014; Elnaga & Imran, 2013). Thus, the above discussion makes us accept the following hypothesis.

**H5:** There is a significant impact to the training and development dimension on achieving organizational excellence in the studied organizations.

## 5. Conclusion

To face volatile environmental changes and increased competition in today's complex world, we will eventually need to use scientific and analytical systems, methods and tools to ensure the viability and smooth running of the organization and then achieving organizational excellence for the business organizations. Thus, taken together, the findings of this study suggested that there was a significant positive association between human resource information system dimensions and organizational excellence. The results were in line with previous studies which confirm on achieving organizational excellence by paying attention to the dimensions which are relevant to the human resource information system dealt with in the current study, where it is cleared from the study results, that human resources planning process can achieve organizational excellence by improving the human resource information system and enhancing overall performance efficiency, thereby assist to fulfill customer requirements faster for business organizations.

As well as, the dimension of the recruitment process can have a real role in achieving organizational excellence, this is by creating a powerful resource base undergoes a systematic procedure in selecting the right candidates and ensuring successful recruitment without any interruptions, thereby enhancing their capabilities towards achieving more organizational excellence for their organizations. Further, the results showed that the dimension of training and development has a significant role in developing the skills of time management, leadership, team management and the optimum utilization of human resources, and then towards achieving organizational excellence for the business organizations. In contrast, HRIS and the use of its integrated dimensions will change the way human resources of the organization interact with each other and with their customers leading to the enhancing the flow of knowledge and skills and therefore augmenting organizational excellence.

Although the findings of the study offer valuable insights and interesting results, the most important limitation lies in the fact that the size of the samples was small. Accordingly, the generalizability of these results is subject to certain limitations as only three organizations were chosen from the Health sector in the Kurdistan region. They were selected as considering three cases within the framework of continuously developing human resources. Thus, it is believed that having a bigger sample size and including more business organizations may yield different data. In addition, there were other limitations during the implementation such as;

1- The difficulty of obtaining the necessary permission and approval from authorities in order to conduct the study due to the serious security situation, as well as health situation (COVID-19) in Iraq in general.

2- The time allocated and the costliness of travelling to organizations under study.

3- Insufficient academic publications in Iraq particularly and the Middle East generally.

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