

IMPACT OF HUMAN RESOURCE MANAGEMENT INFORMATION SYSTEMS ON THE QUALITY OF APPRAISAL PERFORMANCE PROCESS

Somayeh Pouransari, Brunel Business School, Brunel University, UK.

Somayeh.pouransari@brunel.ac.uk

Dr. Wafi Al-Karaghouli, Brunel Business School, Brunel University, UK.

Wafi.Al-Karaghoul@brunel.ac.uk

Dr. Tariq Khan, Brunel Business School, Brunel University, UK.

Tariq.khan@brunel.ac.uk

Abstract

These days the recent development of information systems and their impact on human resource activities is one of the main hot debates in many large organizations. Many managers argue that adopting technology to incorporate the HR activities could help to improve the quality of management's decision making process. Alternatively, there are big companies which are not adopting any specific type of technology in their HR activities. The purpose of this paper is to identify the impacts of HRIS on the quality of HR activities, particularly from the appraisal performance point of view. The concept of the impact of HRIS on HR activities was applied to the case of company X which is one of the leader chemical companies in UK. In that process, interviews were conducted and they were the main methods for collecting personnel feedback, opinions and experiences about their new HRIS.

It could be seen that, although the result of the research showed improvement in the quality of the activities in HR department, the quality growth was not as much as expected. It was assumed that the reason behind this limited impact on some activities could be because the new system needs some more time to implement potential efficiency gains. It is too early to measure the impact of new system on part of HR activities such as employees' satisfaction.

Keywords: Human Resource Information Systems, Management Information Systems, Executive Information Systems, Strategic Information Systems, Information Systems, Human Resources.

1 INTRODUCTION

The purpose of this study is to examine the impact of the new Human Resource Information Systems (HRIS) in the Human Resources (HR) department on appraisal performance with specific focus on the HR department of company X. The reason to select this company is their recent HRIS upgrade as they only apply the new system for one part of the organization placed in north east, UK. New technologies, modernization and globalization are the concepts which push the company to upgrade and implement a new HRIS (Kavanagh et al., 2012). The result of the research could be beneficial to their organization or any other company which deals with similar products. Also, in order to be able to find how an organization faced with the new HRIS several interviews conducted with the HR team. The questionnaire is a way to collect data and to provide a better understanding of the study, which is the identification the impact of HRIS (Kavanagh et al., 2012) on the quality of the activities in the HR department.

HRIS is not a new concept, before company X implemented a new system; the HR team had considerable issues, such as difficulties in communication between employees and different

departments, which, after implementation of the new system, were largely sorted. To identify the impact of the system on the HR activities, it is important to have a good understanding of HRM, information system and technologies, and HRIS. These concepts will be discussed in more details in next section.

There is an intention to improve the quality and speed of HR activities, e.g. appraisal performance, which also encourages an organization to implement the new HRIS. Adopting a new system in an organization could have its own advantages and disadvantages. This fact also is discussed for this particular topic in company X regarding their new system. HR department likes any other department in an organization will be effected by any changes that take place in the Information systems.

Different studies were carried out previously in this area which mostly approved the use of a dedicated HRIS and predicted that they could have positive impacts on the organization. HRIS was used in the HR activities with the aim of improving the activities for this specific organization. They started to adopt technology in their HR activities sixteen years ago, but implementation of the HRIS began six years ago which took a long time to develop. However to improve the system companies just replaced their old HRIS with a new system, rather than incrementally upgrading and extending their existing systems.

Although there are some activities which are not part of HRIS, in several of the activities within HR there was no particular use of any HRIS, previously, which changed after implementing the new system. The new system had a notable impact throughout the organization such as faster recruitment procedure. As, for any new information system, there is period which it is hard to assess the performance results of the new system, owing to the change process and teething problems. This research could examine the different aspects of implementing the new system in HR activities, though it still needs more time to see the real impacts of the system.

Factors, such as saving cost, time and improving the quality of HR activities usually encourage organizations to use an HRIS in their HR activities (Chaffey and Wood, 2005). The aim of this study is to identify the key impacts of the HRIS on appraisal performance activities and to develop a framework for this research. This research investigates the positive and negative impacts of the HRIS on appraisal performance activities in three different stages: Transaction and operational stage, Management stage, and Strategic stage. The study is firstly used desk-based research to collect secondary data from reviewed academic articles, and textbooks, and secondly conduct interviews with HR managers (Three) and advisors (two) to collect the primary data to examine the notions within a real case.

The paper is divided into four sections which starts by critically reviewing the existing literature and is followed by providing discussion of the methodology used; the third part includes the details and discussion about data analysis. Finally conclusions and a summary of the discussion are provided in the last part.

2 LITERATURE REVIEW

To gain a deeper understanding of the impact of the HRIS on the HR activities, it is necessary to explore and analyse the areas of Information Technology (IT), Management Information System (MIS), and Human Resource Management (HRM).

2.1 HR Literature review

Due to the fast speed of change in technology, IT can play an important role in the success or failure of a business. Technology has made the world smaller, boundary removed, and faster (Bartol and Liu, 2002). Hence to analyse the impact of IT as far as HRM is considered, particularly in relation to management of the information requirements for effective HR processes and operations.

Technology could influence HRM in two stages:

1. Computer-based personnel information

2. Networked systems for communication and dissemination of HR related information.

As company X is the example of one of the big companies they need to employ HRIS during second stage mentioned above. Their recent improvements on their HRIS looks like a forward step.

HRIS is a system which manages the activities of the personnel and operations in relation to staffing e.g. appraisal performance other than pay and reward. The important feature of any good HRIS is how efficient it is to gather data in relations to employees, jobs and organization and organizing them in a way to be effective for the workflow in the organization (HR Managers Guide Book, 1995). The idea that IT used in HR is part of HRIS might be very common among the people, but it is not correct (HR Managers Guide Book, 1995). For example the technology which is used in the payroll system is part of the IT in the HR department, but is not part of the HRIS. The integration of MIS into HRM and networked sharing and communication of HR-related information is known as a Human Resources Information System (HRIS), which considers the implementation of technology in the different stages of decision-making and administration required for performance analysis. HRMIS (human resource MIS) maintains all the personnel issues for the present, future and past of the organization. HRMIS plays a considerable role in any medium to large organization. Staff planning, training, job analysis, hiring and many more other activities fall within the scope of an integrated HRMIS (Stair and Reynolds 2012; Laudon and Laudon 2014; chaffey and wood 20).

One of the main debates in using technology in HR practices is networked organizations. It could provide different advantages for organizations such as use of virtual offices, and therefore, reduce real estate expenses (Bartol and Liu, 2002). networking is an important advantage for organizations which IS needs to fully consider it as it helps different departments and individuals share and exchange information. Although the system sounds like a tool which helps in data processing faster and provides shortcuts in the procedures, it may also have a downside, e.g. the system could be complicated, difficult to use or understand by the user (HR Managers Guide Book, 1995). In addition, managing the changes require managerial staff to use the systems effectively which can reduce efficiency (and be disruptive) for a considerable time after implementation.

2.2 Information Systems literature

Information Systems are important to organizations for different reasons. It could easily let individuals to participate in more than one project at the same time. However, it needs advanced information technology (Bartol and Liu, 2002) to give access to the employees in a secure way. Moreover, employees could easily access their information remotely while they are away (Gaines et al. 2012). One of the main points of applying MIS to HR activities in larger organizations is that there is no need to spend lot of time on routine administration and as a result they can focus on more strategic aspects. This concentration also lets them become more professional as analysts and consultants of critical issues for the organisation (Soft world report, 1996). This advantage of IS in HR activities is discussed in section 4 for company X and it can be seen the managers' support of the notion of: there is improvement in managerial activities when proper HRIS is in use.

Another important factor is the impact of MIS on the quality of information which is used by HR managers for decision making (Soft world report, 1996). Although it looks as if it is more useful for administration activities, it has a direct impact on higher-level activities. The quality of the information which is provided in HR information systems is considerably different from traditional paper-based record systems. Instant access to the information enhances the speed and the quality of managerial activities.

According to the above-mentioned benefits, it is important to balance the returns of HRIS in relation to costs (Hussain and Prowse, 2004). Having an HRIS system will incur cost, but on the other hand, it provides many benefits, such as help managers for decision making. This investigation is not primarily concerned with cost/benefit analysis of HRIS systems. But it is clearly important to implement efficient HRIS in such a way as to be more effective which helps in reducing cost and improve speed. What is interesting about the adoption of HRIS in organizations is there are some intangible advantages such as employee satisfaction in addition to tangible benefits which HRIS has such as saving time and less paper-based documents in an organization (Gaines et al., 2012).

Overall, it can be said that an information system is used in three different levels of managerial activities:

1. Senior Management (long-term decisions, i.e. 25 years).
2. Middle Management (short term decisions, i.e. 5-10 years).
3. Lower Management - Operation (day-to-day decisions, i.e. less than 5 years)

And there are three relevant types of information systems (IS) for each of the above level of managerial activities.

1. Strategic Information Systems (SIS)
2. Management Information Systems (MIS)
3. Transactions Processing Systems (TPS)

This paper focuses on the second type IS system mentioned above, i.e. MIS and tried to identify the critical role of HRIS in this particular level. TPS is the information system, which is usually used by operational workers and SIS as an input for strategic managers. MIS, which is the main focus of this paper, is usually used by middle managers (Hussain and Prowse, 2004; Laudon and Laudon ,2014). In section three, it can be seen that the new HRIS in company X implements the new system in different levels for the HR activities and it examines the impacts of the new system on each level.

One of the notable points about HRIS is the fast upgrade of usage of HRIS. While earlier HRIS was used at most operational activities, recently the demand of using HRIS in more strategic levels has considerably increased. It could be one of the reasons which company X decide to replace a new HRIS with the old system.

According to the survey (Soft world report, 1996) the management grades who are potentially more likely to use HRIS in their activities are line managers and HR/Personnel managers (Soft world report, 1996). With regard to the survey which was carried out by Hussain and Prowse, (2004) there are several reasons why HRIS was being used by HR managers as follows.

- It offers a great role of HRIS in achieving professional recognition, and developing HR staff roles.
- To provide up-to-date information to managers.
- To provide high quality HR information to line managers.
- To help to change current organizational activities.
- To provide 24 hours 7 days a week access to the HR information for the managers.
- To prevent duplication of information and faster information processing.
- To make the reports and status of HR activities available at any time needed (Hussain and Prowse, 2004).

Next notable argument in HRIS topic is the way of gathering information, especially in manufacturing part to implement HRIS in the organization this is due to difference of the industry nature.

Next step after collecting the information is to sort them out in a more meaningful form. According to Riordan manufacturing (2009) there is an architecture form for HRIS as below:

- In the organization
- In the whole country
- World-wide

This structure is a suitable one for HRIS in company X as it is an international company which operates in more than 20 different countries.

With regard to the implementation of HRIS in company X, it was important to implement an up-to-date technology (system). This is the point which was stated in HR guide team, (2010) survey. Although technology has changed in recent HR systems, HR guide team, (2010) states that IT was applied mainly in lower-level activities.

Another argument of HRIS is how technology can control and activate maximum potential of HRM. Technology can influence different human resource aspects such as HR strategies and policies, recruitment and selection procedure, and monitoring HR activities. In addition, HRIS could be very critical in organizations, as it could be very effective and useful for decision making (Winkler et al., 2012). That is the reason behind the fact that, impact of IS on HR department is significant for the managers as it could also increase the effectiveness of management functions and decisions (Sadiq et al., 2012).

HRIS is including software and hardware. When the HRIS is investigated in the organisation it is also important to consider the software that HR needs to adopt in an organization. The software which is used in the organization could be important for all different levels of HR activities. Although the main purpose of the software is to automate labour/employees, e-HR strategy, such as e-learning and online recruitment, is also affected by this software (IDS studies plus, 2002). Although what is discussed about HRMS might create an image across everyone's mind that it is only helping in low-level HR activities, it could also influence strategic activities.

One of the main aspects of information technology on HR department is the creation of virtual teams. The main characteristic for virtual teams is to reduce face-to-face contacts, which will reduce time too, physical space, etc. Although they are working for the common purpose in these teams, their tasks are completely individual (Torres-Coronas and Arias-Oliva, 2009). The reduction of person's contact in the organization is not limited to the virtual teams. Online recruitment is another part of the activities which technology replaces people. Saving time and money for the organization is the main benefit of this mode. Although it sounds very helpful and beneficial, there are some considerable issues which might lead to serious problems.

From above, it can be said that IT and IS as communication channels between organization and personnel are playing a great role in today's organizations. Computer and technology experts have the advantage of strong tacit technical knowledge (TTK) which they can share with other employees, to become explicit knowledge (Al-Karaghoul, 2005 and 2000).

2.3 HRIS Literature review

One of the notable points which need to be discussed is having a clear strategy for using the information technology; otherwise it might lead to reverse results (Torres-Coronas and Arias-Oliva, 2009). The personnel should be prepared enough to be able to launch a new HRIS otherwise it could be a negative experience about information system. The three factors for managers to prepare their personnel according to Ruta (Torres-Coronas and Arias-Oliva, 2009) are as follows:

- Awareness of the organization structure.
- Computerizes activities as much as is possible.
- Considering the organization culture and getting the feedback from employees.

According to Sadiq et al. (2012), who have surveyed 37.5% of the respondents, believed that HRIS plays a role in finding suitable candidate. However, an equal number of respondents believe HRIS could cut the cost of recruitment. As it was mentioned earlier in this section, the impact of MIS on HRM it is important to identify all the HRM activities in details. Then later on, it is possible to recognize how MIS influenced HRM activities. According to the time constraints of this research, it was not possible to considering all the HRM activities. Therefore the paper focuses only on the activities related to Appraisal Performance.

The process of evaluating the staff performance according to the standards which are set up before is appraisal performance. It is very important for the manager's decision making especially for the any promotion or payment decisions.

For any appraisal performance process it is important to get the feedback from process. It could help to increase the validation of the appraisal performance (Dessler, 2003). There several different methods for appraisal performance in HR department which is in use by the managers. For example Graphic rating scale method, alternation rating method, paired comparison methods and forced distribution method and so on. However there are some methods which are brought to the appraisal system via proper HRIS. Management by objective (MBO) which was discussed before is one of the appraisal performance tools which are the example of use of technology in performance appraisal (Dessler, 2003). Computerized and web based performance appraisal is one of the helpful methods in evaluating the employees performance in the organization with the technology aid (Dessler, 2003).

One of the main arguments in the appraisal performance discussion is about the key role of appraisal performance in managing personnel performance. The fact of, impact of appraisal could improve performance, is discussed from different point of views. Some people believe that it is really improve the quality of the employees' performance. On the other hand some specialist thinks it could not make any remarkable impact on the personnel productivity. These different points of views are discussed for the JM in the next section.

3 METHODOLOGY

This section presents the purpose of the study and discusses the methods which used for the research. Qualitative research (inductive) method has been adopted for this research as it emphasizes on words and themes, rather than numbers and analysis of data. This research tries to follow main steps of qualitative research proposed by Bryman and Bell (2011; Saurders et al., 2012). The First step of research was to form general research questions and propositions. The Second step was to selecting relevant site and subjects. It followed by collection of relevant data and interpretation of it. The method for gathering the primary data was based on evaluation of the best strategy for responding to the research propositions. The Final step was to develop a conceptual framework and finalising findings. Here are further details of research method.

For the purpose of the research it was important to get the feedback from different level of personnel for this purpose interviews conducted between HR managers and HR advisors. In addition, these two categories of HR team have the key role to roll-out the HRIS for both the launching and implementation the new system. More over the responded interviewees were from both sexes. Some of the interviewees were part of JM even before purchasing proper HRIS in the company and some of them just joined at the same time which the company applied new HRIS about 6 years ago.

Data collection methods and applying both primary and secondary data in a research are highly associated with the value of the research (Jackson, 1994; Sanders, 2012). Data for this research was divided into two main parts: primary data and secondary data. The secondary data is collected through reviewing different books, articles and quality research papers as it is important to consider different point of views in secondary data collection it tried to go through more various references and study different theories and phenomenon.

3.1 RESEARCH QUESTIONS

- How does HRIS impact different level of activities from appraisal performance point of view in HR department?
- Does HRIS alone is efficient to be adopted in HR department for appraisal performance activities?

3.2. PROPOSITIONS

The propositions of this research paper examine in three main levels (transaction, managerial, and strategic) for one of the main categories of HR activities, appraisal performance, as follows:.

- The Use of dedicated HRIS increases the quality of appraisal performance activities at different levels.
- The Use of dedicated HRIS has no effect on the quality of appraisal performance activities at different levels.
- The Use of dedicated HRIS increase on the quality of part of the appraisal performance activities at different levels.
- The Use of dedicated HRIS decreases the quality of appraisal performance activities at different levels.

3.3. INSTRUMENT

The sample of this study consists of six people (three managers and three HR advisors) working for company X who were interviewed. They were asked 38 questions in the form of structured interviews separately for each HR subject activities. The interviews questions were sent via email in advance to all the interviewees including a statement about the purpose of the research. The questions and situation were the same for all the interviewees.

3.4. SAMPLE

Company X selected for this study because of their recent implementation of new HRIS in their HR department placed in Bellingham, UK. Company X has different departments and they operate in several countries which this study focuses on the HR team which exists in manufacturing department (each department has its own HR team). According to the previous studies (annual report, 2007 and 2008) HR department was suffering from inefficient HRIS in the organization due to its legacy. Therefore the acquired a new system from which they expect a significant changes because of their recent HRIS implementation. Although the system is too new, the HR team believes that new HRIS is successful to improve HR activities quality.

In order to collect data from different levels of HR employees (i.e. HR managers, HR advisers, and HR teams) in the HR department, two interviews conducted with three HR managers. One interview with two managers was merged due to time saving and then three interviews conducted with three HR advisers. All the interviews conducted within an hour each during one full day. Co-operate of the HR personnel shows their interest to participate in the research and the result of the study.

To complete the research, there was a need to collect primary data and justify the aim of the research paper. The primary data for this research collect through structured interviews. The interviews were all recorded and kept confidential. The personal information of the interviewees is not revealed anywhere in this paper. The interview was record by sound recorder.

The research approach was designed to get the best result from the interview's results, for this purpose the grounded theory is used to design the research. This research adopted a deductive approach as it tends to test the validity of the predefined hypothesis.

The recorded data from all of the interviewees transformed to the transcript in this part. Although it was very time consuming activity, it was also very helpful to provide a deep understanding for the entire concept of the interviews to the researcher.

The first step in coding was adding all the answers the interviewees provided for each question together. Then according to the approach of the paper for each section of the data (answers) were sorted in different groups. The final step was to identify the key words. Finally, the final draft of transcript in the form of categorized data with distinguished key words was used to analyse data.

The next section presented the result of the analysis and findings regarding to the research purpose. There is no doubt that the more quality data we consider, the result will be more accurate and will be more reliable.

4. ANALYSIS

The results of the interviews for this survey are presented in one of the main categories of HR activities, i.e. Appraisal performance.

HRIS acts as a tool in appraisal of performance but it is difficult to say it is applied efficiently to all aspects of appraisal as one of the HR managers company X thinks like that (Interview 2). I agree with the managers when they say that the HRIS system for appraisal is still not end to end (Interview 4). In fact it may be correct to say HRIS can apply for all aspects of appraisal in the future but not at the current system for sure. Interviewee three is certainly correct when he says that it is efficient to apply HRIS for appraisal (Interview 3). For example the tracking system in HRIS let the managers to be fairer in their assessment.

The current system in company X is the result of eight to nine years of investigation for proper appraisal system .The HR department started process of using an electronic system for its appraisal activities sixteen years ago, but it cannot say that HRIS was there from 16 years ago, as it was discussed before that, all the electronic and computerized activities does not meant HRIS. This fact is completely sensible in company X, despite having an electronic system for sixteen years the system is not satisfactory, while HRIS usually brings a satisfactory process (Interview 2).

Recently the system focus is on improving the managerial aspects of HRIS. The view of the HRIS for different level of activities is illustrated in table 1.

Table 1: Appraisal Performance activities

APPRAISAL PERFORMANCE		
TPS	MIS	SIS
One-to-one conversations	Information access	Realistic targets
Recording system	Colour coding	Next rear responsibilities
Set up roles and responsibilities	Bench strength exercise	

4.1. Transactions Processing Systems (TPS)

The first point needs mentioning is that *the line managers and the employees are trained in appraisal and the appraisal is discussed twice a year in a meeting* (Interview 2). The performance one of the most important activities in the appraisal performance procedure is open one to one conversation. These conversations are about individuals in the job place. HRIS helps in recording the conversation. *This system helps the managers to assess the performance via reviewing the conversations* (Interview 5). There is also a media review and a review by the line managers. Therefore HRIS lets everyone to evaluate according to the unique source which is constant. Next and the most important aspect of the HRIS on appraisal procedure are on recording the system. In fact HRIS is mainly in use as a record system for difficult stages of activities. In HR department of JM and this in fact is true in appraisal stage also. The performance procedure is recorded electronically in JM. All the targets for appraisal are available for the employees and the assessment is based on that. Last notable impact of the HRIS is on identifying the job roles and responsibilities. In the system with proper use of HRIS managers can get the advantage of reviewing the appraisal performance result and apply required changes. The system also provides all the duties and the level of the qualities for employees and managers therefore the complaints get reduced between the personnel and the reliability also gets increased.

Altogether it can be said that HRIS is in use for executive level but there is room to for it to improve and increase the quality of the activities.

4.2. Management Information Systems (MIS)

The first thing we have to consider is about the access to the information in HRIS. The information management system has all the records but everyone have to ask the HR team for the information, as

they did not have access. Although it is keeping the system and its data more secure, providing the access for everyone let the HR managers to save notable amount of time (Interview 2). All the information of the employee about their bonus, benefits, loans and all the facilities are recorded in the snow drop system and its only accessible by HR managers even some part of the HR team cannot have the access to the personal information of the personnel, but it is possible to view if an employee has met his performance objectives and his past achievements or not (Interview 4 and 5). Therefore HRIS act as tools for managers in appraisal to help them to increase the quality of their appraisal.

Colour coding is the second point in MIS which managers gets the advantage of in appraisal procedure. Colour coding is used when the HR managers and line managers discuss about appraisal. Usually colour coding is the system that is used for the promotion and evaluates the eligibility of the employees for any promotion or rewards. When the system uses the colour coding the HR managers, line managers and employees know about the standards of the appraisal and the assessment will be based on that. Therefore employees tend to improve the quality of their performance to achieve the targets. Additionally in the system also there is a space for the line managers which they can comment on the employees. All the information will record in the snow drop system and create individual file for each employee including all the requirement information or the managers to evaluate their performance. Although everything sounds great, there still is a need of some improvement in recording system as some part of the information is recorded manually and kept in proper form. In the recent change of HRIS in the organization the appraisal HRIS has not been updated (Interview 4).

Last argument in MIS appraisal stage is bench rank system. The colour coding is applied when there is vacancy available in the organization and the recruitment is internal. The back ground of the employee who meets the conditions for the position is evaluated to see if they are ready for promotion or not. The bench rank system is used to conduct the appraisal in the system for the new job positions. In conclusion it can be said that HRIS is very helpful and essential in managerial level while still there is a space for it to improve.

4.3. Strategic Information Systems (SIS)

Strategic Information Systems (SIS) provides the realistic targets for the organization. Therefore employees have achievable targets which they know they are going to compare with. HRIS lets the employees to view all the data in the system (Interview 2); while if there was no proper HRIS, the appraisal system might were various according to different people's taste. The notable point of HRIS in the strategic level is about forecasting and setting up the responsibilities of the employees for the next year or even longer time (Interview 3).

According to the requirement for the next year and the result of the appraisal performance of the employees, the responsibilities could be identified for the next year and the gaps could be considers and identified the best alternatives to fill the gap. Figure (1)

To sum up briefly it can be said that because of the implementation of HRIS in a strategic level in has a great impact in the organization. Although it is not direct usage of MIS in appraisal, it combines the results of appraisal as input in the strategic forecasting system.

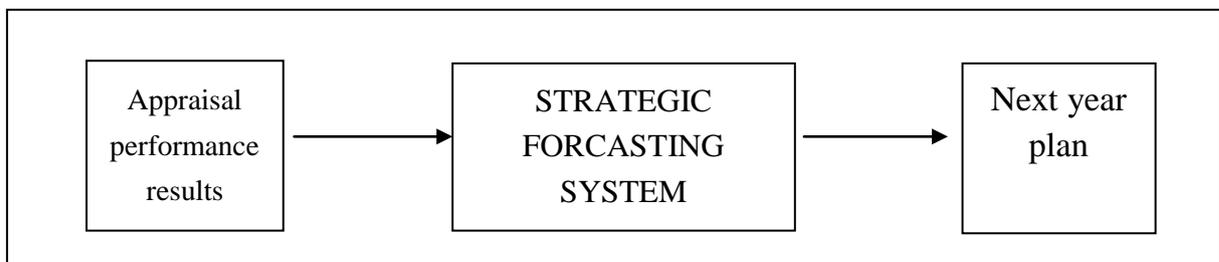


Figure 1: Strategic Information Systems in appraisal performance activities.

5. SUMMARY OF FINDINGS

This section provides summary of findings, according to the analysis part also, the conclusion of the study regarding the purpose of the research is presented. Although there was no specific reason to say that HRIS was as positive as it was in the executive level to increase the quality, there were some considerable results which show it is going to be very essential tool for managerial level. The reasons why we have great expectations for positive result and as a result of this HRIS studies proves this certainty.

The impact of the new system for all different levels of appraisal was not too much but it was distributed between all the levels. We expected the result of the new system to have a larger impact on the quality of activities by the opposite of this has been demonstrated in the analysis.

Finally in the strategic state unlike what was expected from the literature review the result of analysis for JM shows that SIS was not in use except in some few points of decision making but the interest of the organization shows it is going to improve in the near future. We expected the result of the new system to have a larger impact on the quality of activities but the opposite of this has been demonstrated in the analysis.

6. CONCLUSION AND FURTHER RESEARCH

HRIS is not a new system but the impact of the implementing the new system in the quality of the HR activities could be different from activity to activity. It also could be different in the same pattern from organization to organization. In the conclusion it can be said that new HRIS impacts positively on the HR activities quality and in some cases where the result was uncertain the HR team expects success rather than failure.

As the implementation of the new system in the organization brings need for a set of changes the change management found a central role in this process. Part of the change management activities are about the timing before applying the new system. For example investigating the sustainability, feasibility and acceptability, but it does not mean that the change management job gets finished after launching the new system.

Consideration should be given to the change management activities and they should be carried out step by step in the form of first the high priority activities and in the second place medium priority activities and finally low priority activities.

According to this research change management should be in the last part of the second step or in the third step when considering the low priority activities. To get the best result for any change in the system it is important for the organization to have strong monitoring and feedback system from the change process, and then they could identify the gaps and errors and improve the system. Strong change management could improve the impacts of the new HRIS in the current site of the organization and also be used in the other sites in the future.

Next consideration should be given in discussing change management in order to train the personnel and to prepare them to apply the new system. It is very important that everything be done at the right time and right place. Any delay in implementation or implementing in a wrong place could lead to failure of the new system. Therefore it is very important that personnel be fully trained. As a result of the new system being successful can lead to launching the same system to other sites of JM, it is very important to get the most reliable results therefore leading to higher confidence within the system.

According to their budget for this improvement, it is obvious that the HR team considered the efficiency of the new system before implementation and most probably the result of their investigations was to show that the result of the new HRIS is efficient to the organization. But it will be very useful if they analyse everything regarding to the budget planning before expanding the new system to any other sites of the organization.

References :

- Al-Karaghoul, W., Alshawi, S., (2003) Managing knowledge in business requirements identification, *Logistics Information Management*, , Volume 16, Issue 5, pp. 341 – 349
- Al-Karaghoul W., AlShawi S., and Fitzgerald G. (2000) Negotiating and Understanding Information Systems Requirement: The Use of Set Diagram. *Requirements Engineering Journal* 5: p.93-102.
- Armstrong, M., (2009), *Armstrong's handbook of human resource management practice*, 11th ed. Kogan Page Ltd.
- Al-Hamadi, A., Budhwar, P. and Shipton, H. (2007). Management of human resources in Oman. *International Journal of Human Resource Management*, Vol. 18 (1), pp. 100–113.
- Bryman, A., Bell, E., (2011) *Business Research Methods*, 3rd ed. Oxford new york: Oxford University Press.
- Budhwar, P. and Mellahi, K. (2007). Introduction: Human resource management in the Middle East. *International Journal of Human Resource Management*, Vol. 18 (1), pp. 2-10.
- Chaffey, D. and Wood, S. (2005) *Business Information Management: Improving Performance Using Information Systems*, Financial Times Prentice Hall, Harlow.
- Elliott, G. and Starkings, S. (1998) *Business Information Technology: systems, theory and practice*, Addison Wesley longmann Limited.
- Fitzpatrick, K., Fujimoto, Y., Hartel, C. E.J. and Strybosch, V. E. (2007), *Human resource Management: Transforming Theory into Innovative Practice*, Pearson Australia Group Pte Ltd, Malaysia.
- Gaines C., Hoover D., Foxx W., Matuszek T., Morrison R. (2012) Information systems as a strategic partner in organizational performance. *Journal of Management and Marketing Research*, 05/2012, Volume 10
- Kathryn M. Bartol and Wei Liu (2002) Information Technology and Human Resources Management: harnessing the power and potential of netcentricity. *Research in Personnel and Human Resources Management*, Volume 21, pages 215-242.
- Kavanagh, M, Thite, M and Johnson, R 2012, *Human Resource Information Systems: Basics, Applications and Directions*, Sage, UK.
- Koldewijn, R. (2009) The role of IT in HR policies convergence, divergence, crossvergence: a process model based on evidence from the Middle East, August, Master Thesis, University of Twente, The Netherlands.
- Laudon K.C., Laudon J.P., (2014) *Management Information Systems* (13th Edition), Prentice Hall
- Mehmood, A., Zafar, A. and Khan, N. (2008), Kohat University of Science and Technology Institute of Information Technology, Indus Highway, Off Jarma, Kohat, Pakistan.
- Stair, R.M , Reynolds, G. W. (2012) *Principles of Information Systems*. Cengage, Boston.
- Robinson, D. (1997) HR information systems: stand and deliver, Report 335, the institute for employment studies (IES).
- Ruta, C., Teresa Torres-Coronas and Mario Marias-Oliva (2009) *Encyclopedia of Human resources Information Systems challenges in e-HRM*, , Volume (II).
- Sadiq; Khan A. F., Ikhlaiq K., Mujtaba B. G. (2012) The Impact of Information Systems on the Performance of Human Resources Department. *Journal of Business Studies Quarterly* 2012, Vol. 3, No. 4, pp. 77-91

Saunders, M., Lewis, P. and Thornhill A. (2012) *Research methods for business students* 6th ed. Pearson Harlow . England

O'Grady, J. (1995) *HRM project series, job control unionism vs. The new HRM model*, Queen's university at Kingston,

Walker, A. Jr. (1982) *HRIS development: a project team guide to building an effective personnel information system*.

Winkler S. , König C. J., Kleinmann M. (2012) *What makes human resource information successful? Managers' perceptions of attributes for successful human resource information*. *The international journal of human resource management*, ISSN 0958-5192, 2013, Volume 24, Issue 2, pp. 227 – 242

Zahid Hussain , Prowse, P. (2004) *Human Resource Information Systems (HRIS) as means of fulfilling job roles more professionally for human resource (HR) managers*, March, working paper No: 40/07, series Editor: DRCL pass, Bradford university school of management.

Annual report, 2007, 2008. <http://www.matthey.com>

Cornelius, N. (2001) *Human resource management: a managerial perspective*.

Soft world report *Human resource management software, conspectus*, PMP (UK) Ltd, 1996.

The HR Managers Guide to Human Resource Information Systems (1994-1995), second impression, October 1994, Human resource information limited, London, UK