

## Research Article

## THE ROLE OF HUMAN RESOURCES INFORMATION SYSTEMS IN IMPROVING THE PERFORMANCE OF TOURISM SECTOR

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### ABSTRACT

The role of HRM has changed altogether from a traditional (popularly called personnel management) to a strategic one. Most tourism suppliers spend large amounts of money and reserves on HR software, but unfortunately many of them utilize it only for HR administrative purposes rather than for effective and efficient human resource planning (true HRP). This study aims to explore the extent of usage of a Human Resource Information System (HRIS) in Egyptian travel agencies and the advantages they derive from the implementation of the same in the Human Resource Planning (HRP) sub-functions. HRIS outline the integration between Human Resource Management (HRM) and Information Technology. Primary data was collected by means of questionnaires from senior and junior HR executives/managers and employees in Egyptian Travel agencies (Category A) in Cairo. It was found that the greatest uses of HRIS were its contribution to the efficiency and effectiveness of HR planning through HRIS skills' inventory, HRIS training needs analysis, HRIS succession planning and HRIS labor demand and supply analysis. Results showed that identification of unfilled job positions accurately is the most frequently accepted HRIS feature. Travel Agencies can record good HR planning efficiency and effectiveness if HRIS aligns with information system strategy and HR strategy. Travel Agencies need to integrate HRIS functions with other business functions. The study revealed that HRIS needs to offer more intelligent capabilities to increase the effectiveness of HR planning.

**Keywords:** Human Resource Management (HRM), Human Resource Information Systems (HRIS), HRIS Recruiting, HRIS Training, Egyptian Travel Agencies

## INTRODUCTION

Leading management thinkers suggested that, "It is not technology, but the art of human and humane management" that is continuing challenge for executives in the 21st century. (Similarly, Smith & Kelly, 1997) believed that future economic and strategic advantage will rest with the organizations that can most effectively attract, develop, and retain diverse group of the best and the brightest human talent in the market place. Many HR (human resource) executives and managers are so busy taking care of their daily duties, which are generally administrative, that they neglect to consider important issues that are coming down the road. This is a trap that any department can fall into, but it can be especially devastating for HR, which must battle decades of preconceived notions about the department's ability to contribute to corporate planning. Thus, today with an increase in the number of travel agencies, HR is now viewed as a source of competitive advantage. It is necessary for firms to have highly skilled human capital to provide them with a competitive edge. So, an effective management of HR in a travel agency is to gain advantage in the marketplace which requires timely and accurate information on current employees and potential employees in the labor market.

With the changing world and evolution of new technology, meeting this information requirement becomes important. HR managers need to be aware that the change in technology will not only increase the quality of employee information, but also will have a strong effect on the overall effectiveness of the tourism sector. (Gueutal, 2003)

To reduce the routine transaction and traditional HR activities and to deal with the complex transformational ones, the travel agencies began to electronically automate many of these processes by introducing specialized HRIS (human resource information system) or HRMS (human resource management system). HRIS refers to the systems and processes at the intersection between HRM (human resource management) and information technology. It is a system used to acquire, store, manipulate, analyze, retrieve, and distribute information regarding an organizations human resource. An integrated HRIS is a database shared by all HR functions that provide common language and integrates all HR services. Data base nuclear containing information about the competency is required of jobs and competencies of people by all HR functions.

HRIS has increasingly transformed since it was first introduced at General Electric

in the 1950s. HRIS has gone from a basic process to convert manual information-keeping systems into computerized systems. Because of the complexity and data intensiveness of the HRM function, it is one of the last management functions to be targeted for automation. This fact does not mean that HRIS is not important; it just indicates the difficulty of developing and implementing it compared with other business functions (e.g., billing and accounting system). Powered by information system and Internet, almost every process in every function of HRM has been computerized today in tourism sector. (Beckers & Bsat, 2012)

## RESEARCH OBJECTIVES

To explore the functionality and contribution of HRIS in Egyptian Travel Agencies, the objectives of the study were:

1. To identify the contribution of HRIS recruiting to the workforce planning of Tourism Sector.
2. To investigate the contribution of HRIS to the training and development of the workforce in Travel Agencies
3. To evaluate the overall contribution of HRIS to HR decision making and aligning of the HR strategy to the travel agencies' strategy.

## Methodology of the research

Using quantitative approach-The research is considered an exploratory and descriptive study and analytical in some parts, designed to identify the role of human resources information systems (HRIS) in improving the Performance of Tourism Sector in Egypt. This research included: A questionnaire for a sample of Egyptian Travel Agencies (Category A).

## Limitations of the research

The research focused on Travel agencies (Category A) located in Cairo to determine how far the human resources information systems (HRIS) effect on the improving of performance in Egyptian Travel Agencies.

## Review of literature

Human Resource Information System (HRIS) is one of the most important Management Information Systems, which contributes to human resource administration functions of an organization. Aptly described by Kavangah et al., (2007), HRIS is a computer system used to acquire, store, manipulate, analyses, retrieve and distribute information related to human resources. Besides hardware and software, it also includes people, forms, policies, procedures and data. Modern HRIS can help

organizations by automating most HR planning functions. HRIS becomes an important strategic tool since it collects, manages and reports information for decision-making. Fully integrated organizational HRIS ought to interface with other systems enabling and enhancing the communication between departments such as payroll system with accountancy system. Since HRIS deals with employees' personal data, which is sensitive, it should ensure data security while transferring information. An HRIS is capable of identifying trends, evaluating and managing costs, comparing the organization with other competitive organizations and issue reports. New HRIS trends seem to have an important effect on HR planning, embedding new technology with organizational goals and objectives. Enterprise Resource Planning System (ERP), when linked with the HRIS sub system, provides a distinct competitive advantage to an organization over competitors.

HRIS is classified into two types according to their usage: "unsophisticated" and "sophisticated". Payroll and benefits administration, employee absence records keeping electronically are listed as "unsophisticated". Use of IS in recruitment and selection, training and development, HR planning and performance appraisal, is classified as "sophisticated". Pyburn (1983)

is of the opinion that HRIS has become increasingly important to the successful implementation of corporate strategy. the organizational long-term objectives and develop a strategy at corporate level rather than having random, inspirational or unarticulated thoughts about an HR strategy. An organization can then align the HR strategy not only with corporate strategy but also with other strategies. Human Resource Strategy: HR strategy aids the organization to achieve strategic goals in the medium to long term. (Thompson & others, 2012) defined human resources strategy as a co-ordinated set of actions aimed at integrating an organization's culture, organization, people and systems (Figure1). He described HR strategy as the cohesion and consistency of a distinctive pattern of behavior. Its relationship to the corporate strategy determines its effectiveness and success.

Systems can be manual as well as computerized processes used to carry out the tasks within the organization. Human Resources Information Systems (HRIS) or Human Resources Management Systems (HRMS) play a leading role in computerized HR Systems. Therefore, HR strategy plan should not only be in line with corporative business plan but also with organizational Information Systems strategic plan

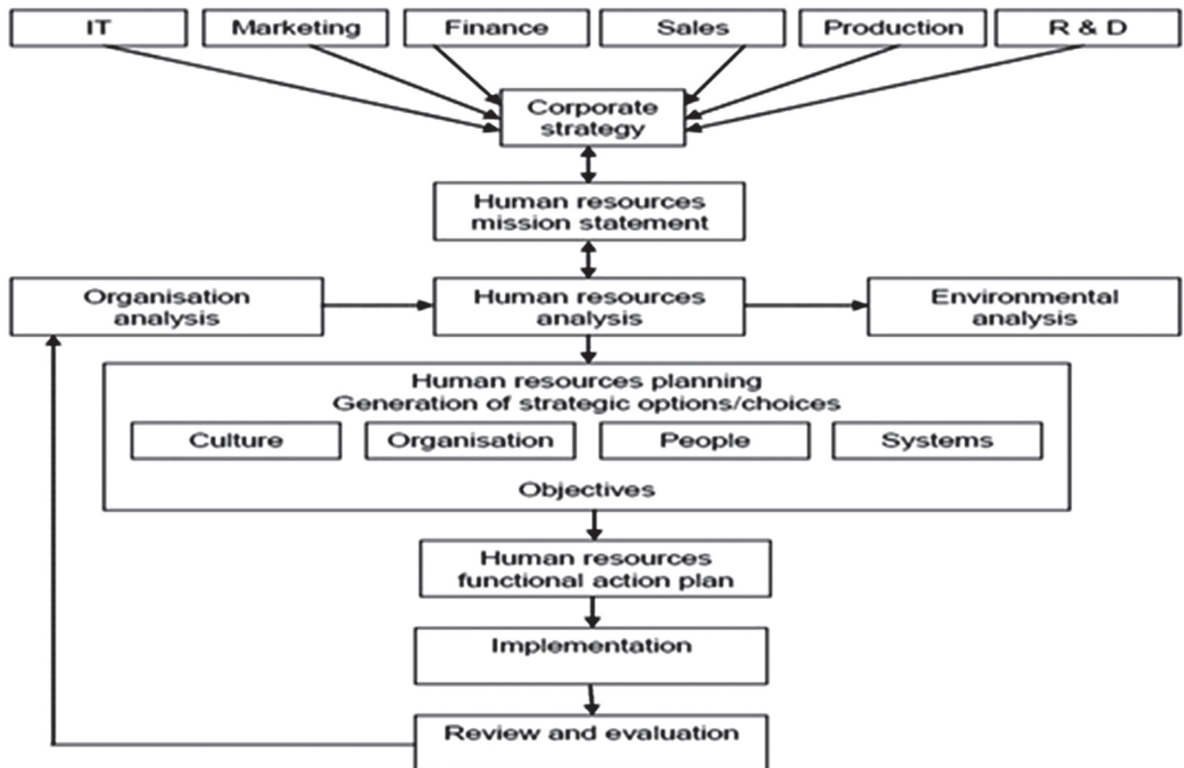


Figure 1 HR Strategy (Thompson et al., 2012)

### Definition of HRIS

A HRIS is the system used to acquire, store, manipulate, analyses, retrieve, and distribute pertinent information regarding an organization's human resources. It is an organizational tool for preparing relevant information for the users and managers to assist with their decision making about human resources of an organization. The HRIS includes people, format forms, policies and procedures, and data of the organization. The prospect of the HRIS is to provide an easy access and service from a series of data to

readable and understandable information to the users. The information that is provided may facilitate any users especially the operational and managerial levels of the organization to review the personnel's performance, and in any important decision making.

The effective use and benefits of HRIS to the users in obtaining the information will be very accurate, relevant, prompt, and available when needed for making any managerial decisions for the organization in a short period of times. It would suggest that the manager must ensure that the HRIS contributes to the

attraction, development and motivation of human resources for the organization. All managers in the organization need to make use of their organization's HRIS so as to provide a powerful competitive edge. (Greengard, 2011)

### Effect of HRIS on HRM

Use of HRIS information in decision making and reporting – it is important to note that different users will have different understanding of what the system is about and of its use to the organization. It would suggest that the HRIS has been compared with a pyramid which it showed that: (Hendrickson, 2003)

1. The base consists the transaction processing level, which related to the processing of basic personnel records.

2. The second level consists the management information areas where the most likely use is the generation of regular and ad hoc reports.

3. Corporate level of management relates to data that can be used for strategic planning and decision support.

Information concerning an organization's employees should be used for decision making in every area of employment. Most HRIS include some combination of the following activities: (Greengard, 2012)

1. Equal employment opportunity affirmative action

2. Health and safety

3. Human resource planning

4. Payroll (Wages and Salaries)

5. Personal Details

6. Performance Management

7. Recruitment and employment

8. Training and development

There are large amounts of software that are available and design specifically according to the needs of the particular department so as to support the HR function. Some of the software or information systems that are being used in an organization that served and offered different usage in HRIS. We may discuss a few which are listed as below:

Employee information system: A set of human resources profile records that contains personal and organization-related information, such as name, address, sex, year of services, education and training, previous experience, salary rate and other personal information. By using this employee information system will allow the manager to identify the percentage of employees who will be of retirement age as the recruit young personnel to fill the positions vacated by retirements.

Performance management information system: This system includes the performance appraisal data in terms of how the performance was measured and reported. Thus, this can lead to a number of decisions to retain,

promote, transfer, or terminate a single employee. Moreover, this system can identify whether the staff has certain specialties or expertise in certain areas, if not, training program can be developed for the staff so as to improve their skills in a particular area. (Grensing, 2005)

**Payroll information system:** This is a system that recorded and concerned with staff pay rates, wage classifications, accuracy of tax calculations and other deductions and monitoring of compliance with company policies that concerning pay and benefits. In

addition, the system needs to provide accurate data to the general of the firm.

The HRIS is a system that helps the users to analyze the data necessary for them to make certain decision properly. However, the decision making still handled by people, not by system itself. There are three steps to generate the manual documentation into a readable and a presentable report for the managers. Managers are using that piece of information or reports to assist them in any way in decision making, especially to manage the human resources. (Britt, 2010)

**Table 1** HRIS's procedure

<b>Step 1: Inputs</b>	The system is a set of activities that allow the users to enter the employee's personal information into the system itself. Of course, the information that is entered to the computer is from the hand written document.
<b>Step 2: Transformations</b>	This input information that we have entered into the computer or the system will change into something more useful to the organization. It takes less time consuming to produce the outcome. For instance, the payroll information system may transform the hours worked into a calculation of salary pay or other tax calculations.
<b>Step 3: Outputs</b>	The output for the employee in terms of the payroll system that we have used and entered the information may produce the paycheck to the employee. At this stage, the output must be available in a timely manner, accurate, and readable.

Source: Britt, J. (2010)

### Current of HRIS in Tourism Sector

#### Web-Based Training or Learning

The move to a web-based system or a corporate intranet is currently the top cost-cutting strategy at use within tourism organizations that utilize HRIS. The use of these systems improves efficiency within the tourism suppliers. For employees that are familiar with the Internet, using a web-based system is easy. By placing benefits information online, communication is streamlined and routine questions are held to a minimum. This frees the HR staff to focus on other areas within the travel agency. The use of a web-based system allows the corporation to control the channels of communication to ensure that the information that is presented is accurate. It also benefits the employees because they are able to access their information quickly and to easily ensure that it is correct. Web-based HR systems can reduce administration costs by 40%. One of the main business drivers is the need to reduce administration within the HR function, allowing the HR staff to focus on more value-added activities. Other examples include the use of e-mail to communicate HR related information instead of the postal service. Another method is providing self-service HR applications within the organization. This is especially effective in tasks that require much

data entry and can be performed directly by the employee. Many organizations are also placing their job applications online to reduce costs and increase accuracy. (Raymond, 2012)

#### Application Service Providers (ASP)

Many small travel agencies struggle with the implementation of an HRIS on a limited budget. The use of application service providers (ASP) has greatly aided the recruitment aspect of the travel agency. Providers such as Job Planet provide a high-end, customer-friendly web site that retains the look of the tourism sector own web site. This service facilitates applicant resume preparation, job searches, and availability notification. Another system is best! Imperative HRMS. This system offers many of the features of more expensive programs such as PeopleSoft and SAP without the large price tag. In addition to the cost savings of the software is the elimination of the high cost of maintaining and upgrading the package. To assist employees in their use of an ASP, some employers are utilizing decision support systems to help the employees make better decisions. A DSS offered by Synergy HR Technologies provides an online plan comparison tool to help employees determine which benefit plan is most appropriate for their needs. Kodak has



used this software to assist its employees in selecting between different health care plans. Dery, Hall & Wailes, 2006)

### **Outsourcing**

The Society for Human Resource Management human resource outsourcing survey report found that 58% of tourism suppliers outsource a portion of or their HR functions. The rising costs of HRIS and the related software are a leading cause for many tourism suppliers to reconsider the need to make such large investments or to turn this function over to an outside vendor. Payroll, relocation services, and FMLA compliance are other functions that can be effectively outsourced. In selecting outside firms to manage the HRIS for a travel agency, one need pay close attention to ensure that the proposed firm possesses the necessary expertise to successfully perform the functions necessary. Another area of concern is that the length of the agreement between the tourism sectors involved can often limit quick change. One of the concerns that arise from the use of ASPs is that of security. With the rash of Internet hackers that have infiltrated many organizations websites, this issue is now becoming more relevant. Lengnick & Moritz, 2003)

### **Employee Self-Service (ESS)**

Employee self-service (ESS) is one of the newest trends in HRISs. The technology

that drives the ESS allows managers to gain direct access to HR databases without the assistance of the HR department. This facilitates the inclusion of HR related information in too many travel agency decisions. The use of self-service HRIS has produced on average a \$255 reduction in transaction costs. The use of HRISs has also resulted in fewer transcription errors when the tourism employee directly enters his or her own information. Due to ESS systems not residing on a server, anyone with an Internet browser can access the services available on the HRIS. Many travel agencies now allow their employees to access their benefits information and pay histories via online. This helps the travel agency by saving printing costs and helps the employee by increasing the rapidity of payment. Along with placing benefits and pay information on-line, many tourism suppliers are now placing job placement information on the ESS systems to keep the employees informed. Additionally, training resources are more easily accessed by using an ESS system. The use of these resources improves the skill set of the employees and assists the organization in tracking the skills and abilities of its employees. (Eshpande & Targowski, 2001)

### **Challenges**

The lack of strategic or operational functionality has been cited as a recurring

problem with current HRISs. Insufficient integration with other systems within the tourism sector, the complication of the system, inflexibility, and the lack of a user-friendly interface were also mentioned. Travel agency's top management must communicate the need to implement new systems. Also, people resist the implementation because they are not asked to participate in the development of new business strategies, solutions, and plans. So management needs to try to get employees involved, which will reinforce acceptance and use.

Many tourism suppliers struggle with the ability to make information available to employees and to implement HRIS goals within a limited budgetary situation. Another problem facing tourism sector using HRISs is that of training the staff on the use of the system. One solution is to utilize third-party instruction. Third-party trainers usually are very flexible, closer to the client, and less expensive than traditional vendor supplied trainers. (Fox, 2008)

#### **Future of HRIS in Tourism Sector**

##### **E-HR**

The future will witness the rapid expansion of many tourism suppliers to utilize electronic HR (E-HR). E- HR can be described as the overall HR strategy that redistributes the HR function throughout the organization and

to trusted business partners. E-HR unites HR activities with finance, customer service, and the supply chain. E-HR is very cost effective, especially for small to medium travel agencies and it also helps to eliminate duplicate data collection. When transactions are designed to be executed via E-HR systems, much of the transactional work that human resource professionals do can be eliminated, 70% of the functions of new HR systems remain untapped because users only make the new system do what the old systems did. So, in the future, firms will need to try and maximize their equipment to realize the full potential. Roberts also urges the use of a reward system to motivate employees to use the new system. (Guinn, 2009)

##### **Security**

A concern of many HR professionals is the security of wireless and ASP HRISs. The security risks are especially heightened with the implementation of the Health Insurance Portability and Accountability Act (HIPAA). Another concern is the disposal of information on hard drives to be discarded. Improper disposal of hard drives has led to several costly lawsuits. (Panayotopoulou, Vakola & Galanaki, 2005)

##### **Portal**

To further leverage the value of an HRIS, travel agencies will come to view the

system as a portal to all knowledge for managers and employees. This communication tool will allow employees, vendors, and customers to communicate with one another via the portal. It will include job information, tools, data, and news. The days of shuffling and maintaining videotapes and having to schedule all employees to meet at a specific time for a meeting can be eliminated. In an attempt to further stretch already strained budgets, many organizations are likely to upgrade rather than replace existing software. (Ngai, 2006)

#### **Workflow**

As technology increases, workflow processes will become smarter. The HRIS could be improved to assist a manager processing performance reviews with prompts related to the real-time evaluation. In addition to this, the use of expert systems to aid personnel will increase. This trend is already being noticed in the fields of law and medicine. (Michael, Kavanagh & Scott, 2015)

#### **Mobile Learning Systems**

One of the most exciting new trends in HRIS is the use of wireless HRIS. A wireless HRIS enables managers and employees to access and change their HR data by the use of a web-enabled pocket PC or cellular telephone. New technology for the future includes the use of wireless PCs, Tablet PCs,

and multi- function devices such as IBM's Mega Pad. Sanjay Kumar, CEO of Computer Associates International Inc., predicts that wireless computing will be the next technological advance to alter the business landscape. Mr. Kumar also expects the continued miniaturization of computer technology to have the greatest impact upon people's daily lives. One of the advantages of wireless HRIS is that the user can access, modifies, and save information from a variety of wireless devices. Researchers are now designing HRIS designed to be accessed via personal digital assistants, notebook computers, and cellular phones. (Eshpande & Targowski, 2001)

This frees the manager from being constrained to a desktop computer or paper based methods of managing HR related information and allows him or her to be truly mobile. Spectrum Human Resource Systems has recently introduced its proprietary mobile HRIS. This system, named I vantage mobile, allows HR managers to take important employee data with them regardless of their location. A large concern with wireless technology is security. In fact, information technology security specialists are now as high in demand as to at the top of the information technology pay scale. The most common method of network attack is the denial of service attack. This attack prevents the network

from being accessed and shuts it down. Other types of attacks involve data theft and attacks generating from within the travel agency. Fortunately, network security is improving with the newer versions of firewalls available, but risks are still evident. (Morley, Gunnigle & David, 2006)

## METHODOLOGY

Using Quantitative approach - The research is considered an exploratory and descriptive study and analytical in some parts, designed to identify the role of human resources information systems (HRIS) in Improving the Performance of Tourism Sector in Egypt. This research included: A questionnaire for a sample of thirty Egyptian Travel Agencies (Category A) in Cairo according to the common statistic rule 2-5% of overall sample (955 travel agency "A" in Cairo).

Research Methodology For data collection, the respondents was HR managers from thirty travel agencies in Egypt as they would have the maximum knowledge about their organization's Human Resource Information Systems, as compared to the actual users or the MIS department. Questionnaires were distributed to senior, junior HR executives, employees involved in both HR planning and HRIS. The questionnaire was based on three main sections i.e., role of HRIS

in recruitment and selection, role of HRIS in training and development, and before and after of HRIS Implementation.

## RESEARCH RESULTS AND DISCUSSION

### Research Results

It was seen that, even though not at the very optimum, HRIS still plays a key and important role in helping with the Human Resource Planning and the Human Resource Training and Development functions. Its diverse uses are:

1. Overall HRIS Recruiting Subsystem Utilization: The overall reaction to a blanket question about HRIS utilization in planning and selection in a travel agency was positive. Majority of respondents agreed that the utilization of HRIS is happening at a satisfactory level in their companies for human resource planning.

2. Opinions Regarding HRIS Job Analysis: Most managers' opinions about whether their HRIS identifies unfilled job positions accurately were positive. This is in sync with the general consensus that HR information systems are very good with managing and manipulating raw data and even information. Also, in a majority of travel agencies, the HRIS itself analyses current job positions and the employees at each of them. In this manner, an HRIS can identify workforce

shortfalls, and thus supports the development of a recruitment plan.

3. Management of Skills Inventory by HRIS in a travel agency: HRIS does job analyses accurately. Another aspect of this is that an effective system should manage the skills inventory in its entirety in the travel agency. A majority of managers felt that this is being performed adequately, but there are fewer managers who feel that comprehensive reporting is being done.

4. HRIS and E-Recruiting: It was learnt that companies do not make use of the e-recruitment module/subsystem of their HRIS at all in many cases. This is especially true

regarding leveraging an employee's talents in the right place at the right time. This is one aspect that the researcher feels is not getting enough attention by HRIS developers.

5. HRIS's Role in Training and Development: Managers' opinions are not as positive when it comes to their HRIS providing an intelligent insight into their travel agencies' training needs and evaluation. Besides, as compared with human intervention, the outcome of a training needs analysis (TNA) is not as accurate when done by the HRIS of the organization. 50% managers agreed that the accuracy of an HRIS could be improved.

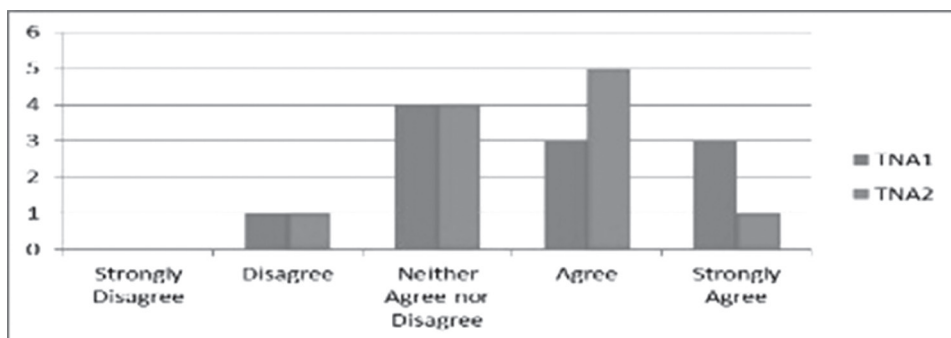


Figure 2 HRIS training needs analysis in Travel Agencies

## Discussion

1. HRIS and Evaluation of the Training Process: There were a total of seven factors which were used to determine the usefulness of an HRIS to the training process in a travel agency. In most of these factors, managers

have answered in the affirmative. This means that HRIS is definitely a useful tool to have to assist with the training process. The one area where an HRIS lacks is that it does not assist in fixing the budget of training and development programs accurately. But these opinions could

be biased because there erroneous results could also be because of faulty inputs by the managers.

2. HRIS and Its Role in Succession Planning: Since succession planning at small travel agencies is still a relatively new concept, it was not expected that many managers would agree to the help rendered by the HRIS in this department. In fact, most managers felt that they themselves make better and faster decisions regarding successors, as compared to an automated HRIS. Once again, the data management capabilities of HRIS are brought to the fore, as it was felt that an HRIS identified specific key positions and minimized costs associated with succession planning.

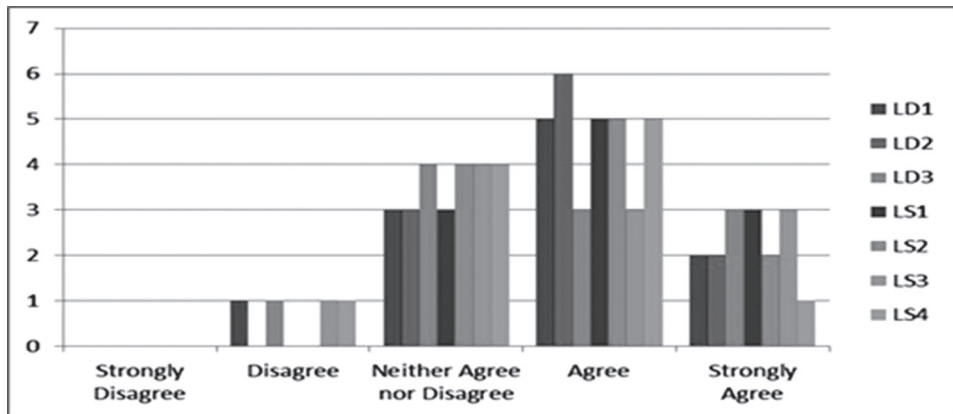
3. Labor Demand & Supply and The Impact of HRIS: Most managers could count

on HRIS to do the job well. This is because, after all, this is what HRIS was built to do flawlessly. Also, forecast of human resources which are required is made that much easier with the help of an HRIS, as compared to without. The only thing that an HRIS lags behind in, is that it sometimes fails to identify human resources needed to achieve organizational goals.

4. HRIS Data Analysis and Decision-Making Capabilities: Most managers felt that with an HRIS, they were better able to align themselves with organizational strategy and even with the organization's Information System strategy. It was seen that managers were not of the opinion that an HRIS goes a long way in ensuring that the HR function as a whole identifies with corporate strategy.

**Table 2** Responses to how HRIS supports labor demand and supply analysis in Travel Agencies

Item	% Agree
HRIS manages internal information within the travel agency	63.64%
HRIS manages external information outside the travel agency	72.73%
HRIS constantly analyses and match the demand for human resources	54.55%
HRIS forecasts supply of human resources	72.73%
HRIS estimates future human resources requirement of the travel agency	63.64%
HRIS ensures organization has right kind and numbers of employees at right place at right time	54.55%
HRIS identifies human resources need to achieve organizational goals	54.55%



**Figure 3** HRIS in labor demand and labor supply in Travel Agencies

**HRIS Decision Making and Data Analysis:** HRIS decision-making process was measured using eleven factors. All the respondents have responded to all eleven factors. Most respondents agree with the factors, where mode and median indicate four.

**Table 3** Responses to how HRIS helps in decision-making in Travel Agencies

Item	% Agree
HRIS provides an opportunity to become a strategic partner with top management	45.45%
Role of HRIS aligns with the organization's HR strategy	72.73%
Role of HRIS aligns with the organization's Information System strategy	54.55%
HRIS has improved the quality of my decisions	54.55%
Because of HRIS, I can better set my HR decision-making priorities better	45.45%
Through HRIS, more relevant information has become available to me for decision-making	45.45%
Through HRIS, the speed at which I analyze decisions has increased	63.64%
HRIS focuses on decisions made at a higher level by senior management and executives	54.55%
Future supply and demand of labor can be forecast using what-If analysis function of HRIS.	54.55%
HRIS simulation models support HR decision making.	54.55%
Goal-seeking method empowers HRIS decision making.	54.55%

Before the implementation of the HRIS in travel agencies, 22% of the employees required on-the-job training before beginning to perform their duties, 7% requested reassignment and 13% quit their job whereas after implementation of the HRIS, only 6% of the employees required on-the-job training, 2% requested reassignment and 8% quit their job – a considerable decrease in the need for on-the-job training and a modest decrease in employees requesting re-assignment and quitting their job. Before implementation of the HRIS, 78% of employees handled their job successfully and efficiently which increased to 91% after the HRIS implementation. Employee satisfaction on-the-job improved from 66% before to 84% after the HRIS implementation. Task-related employee grievances decreased from 56% before implementation to 23% after implementation of the HRIS while 46% of the employees were successful in performing their jobs after training prior to the HRIS implementation compared to 68% after implementation of the HRIS. Sixteen percent of the employees had committed work-related mistakes on-the-job before the HRIS implementation compared to 5.4% after the implementation. Employee productivity rose

from 78% before the HRIS implementation to 89% after the HRIS implementation, and employee absenteeism decreased from 13% before the HRIS implementation to 7.9% after the HRIS implementation. The rate of employees carrying out job-related tasks correctly rose from 92% to 97%, and the allocation of employees to the wrong job decreased from 8.5% before the HRIS implementation to 3% after the HRIS implementation.

There was an overall improvement in every aspect of the job covered by the questionnaire: a 16% decrease in training on-the-job, a 5% decrease in employees requesting job reassignments, a 5% decrease in employees quitting their job, a 13% increase in employees handling their job successfully and efficiently. Job satisfaction increased by 18%, task-related employee grievances decreased by 33%, the success rate of employees after training increased by 22%, mistakes being committed on-the-job decreased by 10.6%, employee productivity increased by 11%, absenteeism decreased by 5.1%, correctly performing the job increased by 5% while the allocation of employees to the wrong job decreased by 4.5%



**Table 4** Before And After Results of HRIS Implementation In Travel Agencies

Item	After HRIS	After HRIS
	Implementation	Implementation
Employees Requiring On The Job Training	22%	6%
Employees Requesting Reassignment	7%	2%
Employees Quitting Their Job	13%	8%
Employees Successful And Efficient In Handling Their Job	78%	91%
Employee Satisfaction On Job	66%	84%
Task-Related Employee Grievances	56%	23%
Employees Successful In Their Job After Training	46%	68%
Employee Mistakes / Accidents Committed On The Job	16%	5.4%
Increased Employee Productivity	78%	89%
Employee Absenteeism	13%	7.9%
Employees Carrying Out Tasks Correctly	92%	97%
Allocation Of Employees To The Wrong Job	8.5%	3%

## SUGGESTIONS AND RECOMMENDATIONS

1. Most Travel Agencies have e-recruiting facility but they do not use it fully since they have more faith in traditional methods of recruiting. HRIS e-recruiting facility is used by only a minority of senior HR executives to recruit employees. Lack of top management support, funds, HR knowledge of system designers and HR solutions, are the main factors keeping travel agencies away from HRIS. Of all the HRIS subsystems used for recruitment and planning and training and development, the maximum and most useful contributions made by an HRIS system was

when an HRIS is used to supplement the already existing functions in a positive manner.

2. The results also show that identification of unfilled job positions accurately is the most frequently accepted HRIS feature. There is a high positive relation between HRIS job analysis and the effectiveness of HR planning. Most Travel Agencies observed the HRIS contribution to efficiency of HR planning through HRIS skill inventory, HRIS TNA, HRIS training program evaluation, HRIS succession planning, HRIS labor demand and supply analysis and decision-making. This study highlighted the need to offer more intelligent

capabilities of HRIS to increase the effectiveness of HR planning.

3. Findings suggest that there is evidence linking HRIS recruiting subsystem to the workforce planning of mid to large sized travel agencies. It was found that higher usage of the training and development function of HRIS resulted in better training needs analysis and better predictability. However, it was seen that HRIS rarely helps in either predicting accurately or reducing the costs associated traditionally with the entire training process.

4. The study revealed that the relationship between increased usage of HRIS results in an increase in both effectiveness and efficiency of the travel agency. Therefore, the overall contribution of HRIS to the recruitment and planning functions, as well as to training is beyond doubt.

5. Research findings clearly show that senior HR executives are well aware that they can increase the efficiency of HR planning through HRIS, saving time and cost. Travel Agencies should identify the strategic value and competitive advantage that they can gain through HRIS in HR planning. Contradicting situations need to be documented and discussed with the vendors. For example, even though most senior HR executives believe that managers find HRIS detailed training plan

relevant to their needs, not many (senior HR executives) are convinced that employees find HRIS training programs relevant to their (employees') needs.

6. Travel Agencies should come to an agreement with the vendor on HRIS features when they invest on HRIS. Required subsystems need to be planned and ordered beforehand to avoid malfunctions due to incompatible infrastructure and higher upgrading cost. Travel Agencies would record good HR planning efficiency and effectiveness if HRIS aligns with information system strategy and HR strategy. Organizations need to integrate HRIS functions with other business functions.

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