JEBA Vol.1 No.2 (2025) - 4926 - pp. 1-9

Journal of Entrepreneurship and Business Administration

journal homepage: http://journals.lagh-univ.dz/index.php/jeba

# The Role of Human Resource Information Systems in Supporting Talent Management: An Analytical Study

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a r t i c l e i n f o

*Article history:*
Received:
23 August 2025
Accepted:
13 September 2025
Published:
01 October 2025

*Keywords:*
Talent
Talent Management
Human Resources
Information System

*JEL Classification:*
M15, M12, M54

a b s t r a c t

The main purpose of talent management is to create a competent workforce that will stay with the company in the long run. The exact way to achieve this will differ from company to company. But the big problem that managers face when they try to adopt talent management is how to determine talented employees in their companies. Therefore, this study came to determine the importance of Human Resource Information System (HRIS) in helping to apply talent management.

To achieve this, a qualitative approach was adopted by reviewing the latest scientific sources and references specialized in this field and then summarizing and simplifying their ideas. The study reached many results, perhaps the most prominent of which is that Having a developed human resources information system will inevitably help and facilitate the activation and application of talent management, via providing updated information on the status and development of human resources in the organization.

## 1. Introduction

As someone said 'Whatever your role - manager, coach, parent or performer - making the most of the talent development process is always complex and challenging. Therefore, it is good to get a clear and concise road map to work from. Therefore, every company wants to maximize their return on their talent. Labor is typically the single largest expense in an organization, but for good reasons. The people truly make a difference and can be the deciding factor in whether a company gets phased out or rises to new levels of growth and prosperity. The more employees a company has, the more difficult it is for a manager to find the rare pearl internally. Indeed, in these conditions, knowing all the skills and abilities of each person is complicated.

Hence, Human resources information systems (HRIS) and other types of HR software have been increasingly adopted as companies have discovered how this technology assists with managing information and automating mundane record-keeping tasks. So, it includes recording

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How to cite: LADJALI, A. (2025). The Role of Human Resource Information Systems in Supporting Talent Management: An Analytical Study. *Journal of Entrepreneurship and Business Administration, 1*(2), 1-9.
DOI: https://doi.org/10.34118/jeba.v1i2.4926
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all employee updated information and data.

That is why this study came to answer the following problem: What is the importance of the human resource information system (HRIS) for applying talent management?

To answer this problem, we propose the following hypotheses:

- Talent management focuses solely on the human resources needed for strategic positions in an organization.
- HRIS is the best key to the success of talent management implementation and adoption.

### 1.1. *Objectives*

- Determining the concepts of talent and talent management;
- Knowing the process of talent management;
- Determining the concept of HRIS and its importance;
- Diagnosing the role of HRIS for adopting talent management.

### 1.2. *Methodology*

This study has adopted a qualitative approach. Therefore, the descriptive method has been also used via reading and summarizing various theories works that are related to the topic of study.

## 2. Definition of talent

### 2.1. *What is talent?*

Professional literature offers an abundance of talent definitions. Comparing these makes it possible to select specific features of talent identified by various theoreticians and researchers. It enables the creation of a map of different meanings of talent, which makes the subject more comprehensive and its understanding more homogeneous. (Pocztowski et al., 2021, p. 9)

- Defining talent may refer to features of an individual or a group: the superior mastery of systematically developed abilities or skills.
- It may focus on a specific contribution of individuals to an organisation: talent means the total of all the experience, knowledge, skills and behaviours that a person has and brings to work.
- Sometimes talent is defined as a whole group of employees: is essentially a euphemism for ‘people’.
- It is also defined by means of uniqueness: a pool of employees who are exceptional in their skills and abilities.
- Some authors emphasize the role of performance/outcome: those workers who ensure the competitiveness and future of a company.

### 2.2. *Talent vs. competency*

Over time, our definitions of what constitutes the right stuff for defining talent have evolved; the accepted standard is now the language of competencies. A single competency is defined as a cluster of behaviors representing one facet of what is needed to perform a job. For example, Composure is frequently cited as a personal competency that is important to many positions. A

cluster of behaviors that demonstrate composure includes showing patience, responding calmly to stressful circumstances, and demonstrating control of emotions. Having, and using, this kind of common vocabulary is especially vital in judging candidates for complex, cognitive jobs such as managing and leading. And, of course, competent people are the essential factor in successful and enduring organizations. Without them, organizations are only empty buildings and idle machines. People have the ideas, and produce, market, and sell the organization's goods and services. Only people can organize and energize the enterprise. But what defines their competence? Is it raw talent? Knowledge? Skill? Ability? Personality? Motivation? Competencies are now the most prevalent method used to define ideal employees and have become a fundamental part of talent management systems across organizations. Talent management has been defined by the Society for Human Resources Management as "the implementation of integrated strategies or systems designed to increase workplace productivity by developing improved processes for attracting, developing, retaining and utilizing people with the required skills and aptitude to meet current and future business needs" (emphasis added). Therefore, having a competency-based system to link these processes is the key to cohesive and effective talent management. (Griffiths & Washington, 2015, p. 1)

## 3. Principles of Talent Management

### *3.1. Definition of Talent Management*

Talent focus is a principle of TRM and means making talent the focal point of your thoughts and actions. It's not a case of seeking talent for a vacancy, but rather vice versa: a vacancy is sought for an identified talent. (Trost, 2014, p. 12) Talented, motivated candidates are always sought, regardless of acute vacancies, at least in terms of hard-to-fill positions which permanently or frequently require a certain number of staff. A talent-focused mindset involves thinking of each conversation as a job interview, just like every salesperson's conversation is viewed as a pitch. In extreme cases, it's not just the HR department which is constantly on the lookout for promising talent, but all staff and managers. If the talent is given a positive initial assessment, attempts are made to establish a long-term relationship with these candidates, with a view to employment at some point. In doing so, the employer bears in mind the candidates' individual career preferences and actively caters to these. (Trost, 2014, p. 12) The management of talented (or best) employees generally. This exclusive approach refers to the management of high-achieving employees. Most of these meanings agree that an optimization of talent potential will lead to better organizational performance. (Al Ariss, 2014 , p. 3)

The traditional approach to recruitment is to focus on vacancies. A vacant, approved position in need of filling sparks action in the areas of HR marketing and recruiting. A recruiting process is only started when a vacancy arises. Employers usually place job advertisement based on the respective position and associated challenges and then await and preselect applications. Promising candidates undergo a more intensive selection process, with the best one ultimately offered the job. The problem- the vacancy- is solved; the project is complete and can be filed away. Unsuccessful applicants are sent a rejection letter. The top half of Fig. 1 illustrates this vacancy-focused approach, contrasted with a talent focused one at the bottom. (Trost, 2014, p. 11)

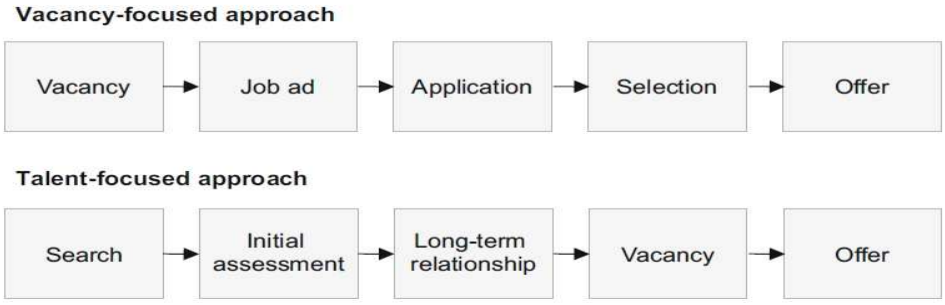



**Fig. 1.** TM Hiring Vs Traditional Hiring Process. Source: (Trost, 2014, p. 12)

### 3.2. *TM is Strategic and Long-Term*

As will be demonstrated, TRM activities particularly relate to key functions, i.e. functions of extreme, strategic importance to a company. This means TRM has a direct influence over a company's future. These positions not only require suitable staff, but staff are also significantly better than those in comparable positions at rival companies. This is why TRM talks about "talent", i.e. candidates who demonstrate the potential to put in above-average performances in the long term. (Trost, 2014, p. 12) Gaining talented staff is much more difficult than employing "normal" workers. They usually adopt a passive approach to their search for new career prospects, and have numerous, attractive options. (Trost, 2014, p. 12)

The significance of talent management tends to increase when the ever-more competitive environment is taken into account. The key arguments behind this are organisational needs connected with human capital, which greatly influence a company's future market position. Dries (2013) identifies two categories of demographic risk faced by modern organisations. The first (resource risk) concerns the decreasing quantity of expert human capital resulting from the fact that the generation of baby boomers is currently reaching their retirement age. This entails losing accumulated expert knowledge and experience for companies. Due to its size, the incoming generations unfortunately do not make up for the loss. The second risk (productivity risk) concerns the increasing level of costs connected with retaining older employees in the company. Calo (2008) lists costs connected with their work (outdated qualifications, decreased motivation, etc.) as examples. (Pocztowski et al., 2021, p. 6)

### 3.3. *TM as a Process*

Below is an overview of the TRM components, with Fig. 2 showing a graphic summary.

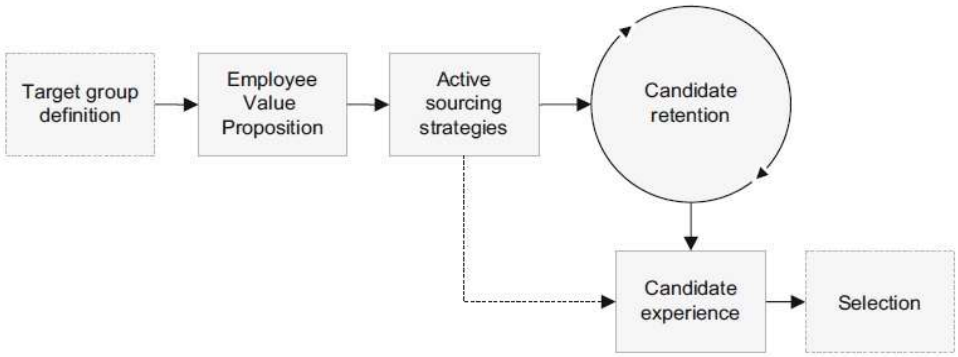



**Fig. 2.** TM as a Process. Source: (Trost, 2014, p. 15)

We can summarize the phases of the TM process as following: (Trost, 2014, pp. 14-15):

- TRM starts with defining the target group. As already mentioned, TRM concentrates on hard-to-fill positions requiring a significant number of staff for the long-term. These are known as bottleneck functions. On the other hand, TRM particularly comes into effect when the identified positions are strategically relevant roles, i.e. roles the company should fill with better staff than those occupying similar positions at rival companies. These are also known as key functions. This now raises the question as to who the respective target groups on the labour market are.
- If the target group on the labour market has been defined, it is then a question of how they can be convinced of the advantages of the key or bottleneck functions. A clear, authentic, persuasive argument is ultimately required. These arguments are collectively known as the employer promise, forming the basis for the approach, as well as for all HR marketing campaigns aimed at the target group.
- Active sourcing strategies specifically involve finding suitable, talented and motivated people, and contacting them personally. As mentioned above. Several often-well-known approaches are adopted here, such as campus recruiting, employee referral programmes or searches for candidates on social media platforms (e.g. LinkedIn). In recent years, many forward-thinking companies have also dared to explore completely new, creative, and sometimes aggressive paths.
- The essence of TRM is to build a talent pool and manage personal relationships with selected talent in a structured, systematic manner through candidate retention. The idea behind this is pretty simple: employers try to stay in contact with promising talent in order to secure them for the company sooner or later. As shown in Fig. 2, this is a cyclical process in which an employer continuously thinks about how to further the relationship and any necessary measures and acts accordingly.
- All previous efforts ultimately aim to gain talented candidates as employees. The focus is thus on getting a candidate to eventually express concrete interest in a usually actively offered job, prompting a sort of selection process, whose intensity naturally depends on prior knowledge about the candidate. It is particularly crucial in this phase to convey a positive candidate experience. This also especially applies to candidates who have applied directly for a position, and who are not part of a candidate retention program. The analogy with consumer experience in a marketing context is not just a coincidence.

## 4. Discussing the concept of HRIS

### *4.1. Defining HRIS*

Human resource information systems (HRIS) are one type of system used to manage and analyze data in organizations, as HR uses data to influence business performance. (Lussier & Hendon, 2017, p. 218) A human resource information system (HRIS) represents an information system that stores, manipulates, analyses, retrieves and distributes information on HR (Hook & Jenkins, 2019, p. 144) Thus, (HRIS) are an important tool to store employee records and make them accessible. (DeCenzo et al., 2016, p. 83)

A properly designed HRIS will provide information on the number of existing staff in various categories of posts. This represents the internal supply of human resources and may include personal data that may impact on a person's performance and how long they are likely to be employed with the organization. (Hook & Jenkins, 2019, p. 144) Human resource information

systems (HRIS) are systems used to collect, record, and store, analyze, and retrieve relevant HR data. HRIS data matched with the appropriate computer software have many applications that support HR activities. These include applicant tracking, skills inventories, payroll management, and benefits administration. (Gomez-Mejia et al., 2012, p. 84)

### 4.2. *Importance HRIS*

The specific benefits of HRIMS include: (Nankervis et al., 2020, p. 149).

- Improved planning and program development
- More rapid information processing and improved response times
- reduced administrative and HR costs
- enhanced accuracy of information
- More comprehensive communication at all levels
- standardized HR processes
- closer links between HR practices, policies and strategies
- Capacity for greater global orientation for multinational companies.

### 4.3. *Computerized HRIS*

Most of today's HRIS are computerized. (Gomez-Mejia et al., 2012, p. 82) Most organizations today use complex computer systems to manage and manipulate those data. (Lussier & Hendon, 2017, p. 218). Therefore, HRIS is a computerized system that assists in the processing of HRM information. (DeCenzo et al., 2016, p. 83) via HRIS Software. HRIS Software organizes HR data to help decision makers be more effective and measure results with dashboards like this one from SAP. (DeCenzo et al., 2016, p. 109) Human resource information systems (HRIS) are interacting database systems that "aim at generating and delivering HR information and allow us to automate some human resource management functions." Some of the most common features in HRIS include modules for tracking attendance and leave, job, and pay history and logging appraisal scores and review dates. Others include modules for benefits enrollment and tracking, succession management, training management, and time logging. There are additional modules available depending on the size and type of organization. (Lussier & Hendon, 2017, p. 219)

A standard feature of a modern (or computerized) HRIS is the use of relational databases, which store data in separate files that can be linked by common elements. These common elements are fields identifying the type of data. Commonly used fields for an HR database include name, Social Security number, job status (full- or part-time), hiring date, position, title, rate of pay, citizenship status, job history, job location, mailing address, birth date, and emergency contacts. A relational database lets a user sort the data by any of the fields. This system is far more sophisticated than the old-fashioned method of filing employee data by name, with one file per employee. (Noe et al., 2018, p. 276) Another popular use of an HRIS is applicant tracking or maintaining and retrieving records of job applicants. This is much faster and easier than trying to sort through stacks of résumés. With relational databases, HR staff can retrieve information about specific applicants or obtain lists of applicants with specific skills, career goals, work history, and employment background. Such information is useful for HR planning, recruitment, succession planning, and career development. Taking the process a step further, the system could store information related to hiring and terminations. By analyzing such data, the HR department could measure the long-term success of its recruiting and selection

processes. (Noe et al., 2018, p. 277)

## 5. HRIS as a Key to Apply Talent Management

Talent Management means a concept that prizes talented employees and focuses HR practices on hiring them and keeping them by helping them develop their skills and realize their potential. Retaining these talented employees is crucial, and HRM must help managers understand that they play a critical role in reducing employee turnover. It is estimated that about 75 percent of the reasons employees quit their jobs and leave organizations are within the control of managers, such as being honest with employees, giving them challenging work, and recognizing them for their performance. (DeCenzo et al., 2016, p. 84)

An HRIS can support talent management by integrating data on recruiting, performance management, and training. Integrating the data means, for example, that the HRIS user can see how specific kinds of recruiting, hiring, and training decisions relate to performance success. This helps HR professionals identify how to develop the organization's talent and where to recruit new talent so that an ongoing supply of human resources is available to fill new positions or new openings in existing positions. So far, relatively few companies have tapped the potential to make predictions based on available data. Technology exists, even in HRIS investments already made, but companies need to bring in people with the necessary analytics skills. Those that do so are positioned to gain a competitive advantage. (Noe et al., 2018, p. 46) Via HRIS, assessing current human resources begins by developing a profile of the organization's current employees. This internal analysis includes identifying the number of people and skills necessary to support business plans and evaluating the skills and strengths of current staff. Human resource information system (HRIS) software makes it easier for most organizations to generate an effective and detailed human resources inventory report. The input for this report comes from applications and other forms completed by employees and checked by supervisors including education, training, prior employment, current position, performance ratings, salary level, languages spoken, capabilities, and specialized skills for all employees. From a planning viewpoint, this information is valuable in determining what skills are currently available in the organization. The HRIS database also has value in other HRM activities, such as selecting individuals for training and development, promotion, and transfers. The HRIS database can also identify skill gaps that may threaten the organization's ability to successfully meet its goals. (DeCenzo et al., 2016, p. 84)

HRIS have become valuable talent management resources for HR professionals. Each individual manager's skills inventory is compared to the list of positions in order to determine if there is sufficient managerial talent to cover potential future vacancies. Should skill shortages exist, HRM can either recruit new employees or intensify employee development efforts. (DeCenzo et al., 2016, p. 84) At Intel, for example, succession starts shortly after an individual is hired. Employees marked for promotions are coached in management activities and are extensively trained to assume positions of greater responsibility. Replacement charts look similar to traditional organizational charts. Current job holders are listed in their positions, and those individuals targeted to replace them are listed below the expected time at which they will be prepared to take on the needed responsibility. (DeCenzo et al., 2016, p. 84) For example, Hilton Worldwide is giving managers access to talent data so they can integrate it with business data to make more effective and strategic decisions about talent and performance. This allows managers to perform workforce planning by seeing the gaps between workforce projections and available supply of staff or projected turnover and modeling different scenarios. (Noe et al., 2017,

p. 47) Also, strategic HR information pertaining to biographical information and skill levels of staff, for example, can help in HR planning and talent management. (Amos et al., 2016, p. 112)

## 6. Conclusion

### 6.1. *General results*

- The human resources information system is the best tool to know about the states of human resources in organization;
- There are two types of human resources information system; Traditional and Computerized;
- The Computerized human resources information system basis on using computer and information technology to deal with the data;
- The human resources information system is considered from the latest development of HRM;
- Talent management is one amongst the latest developments of HRM;
- The main purpose of talent management is to create a competent workforce;
- The talent management is the strategic view of competencies management;
- The success of talent management depends on the availability of appropriate information on human resources, inside and outside the organization;
- HRIS is the best source of information about human resources;
- HRIS is the key of applying talent management.

### 6.2. *The results related to the hypotheses*

- Talent management focuses solely on the human resources needed for strategic positions in an organization; is accepted.
- HRIS is the best key to the success of talent management implementation and adoption; By providing accurate data and information on human resources. In addition to the possibility of analysis and evaluation; is partially accepted because the computerized HRIS is the best key to the success of talent management implementation and adoption not traditional HRIS.

### 6.3. *Suggestions*

- For organizations who want to adopt talent management, I suggest for them they should try to employ a data analyst for the human resources information system, who has technological qualifications and qualifications in human resources management to develop a human resources information system;
- Adopting the Computerized human resources information system rather than traditional human resources information system will help organizations to apply talent management;
- Allocate talent management only to strategic functions, not all functions of the organization.

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