Mohammad Islam

# THE IMPACT OF HUMAN RESOURCE INFORMATION SYSTEMS ON ORGANIZATIONAL EFFICIENCY

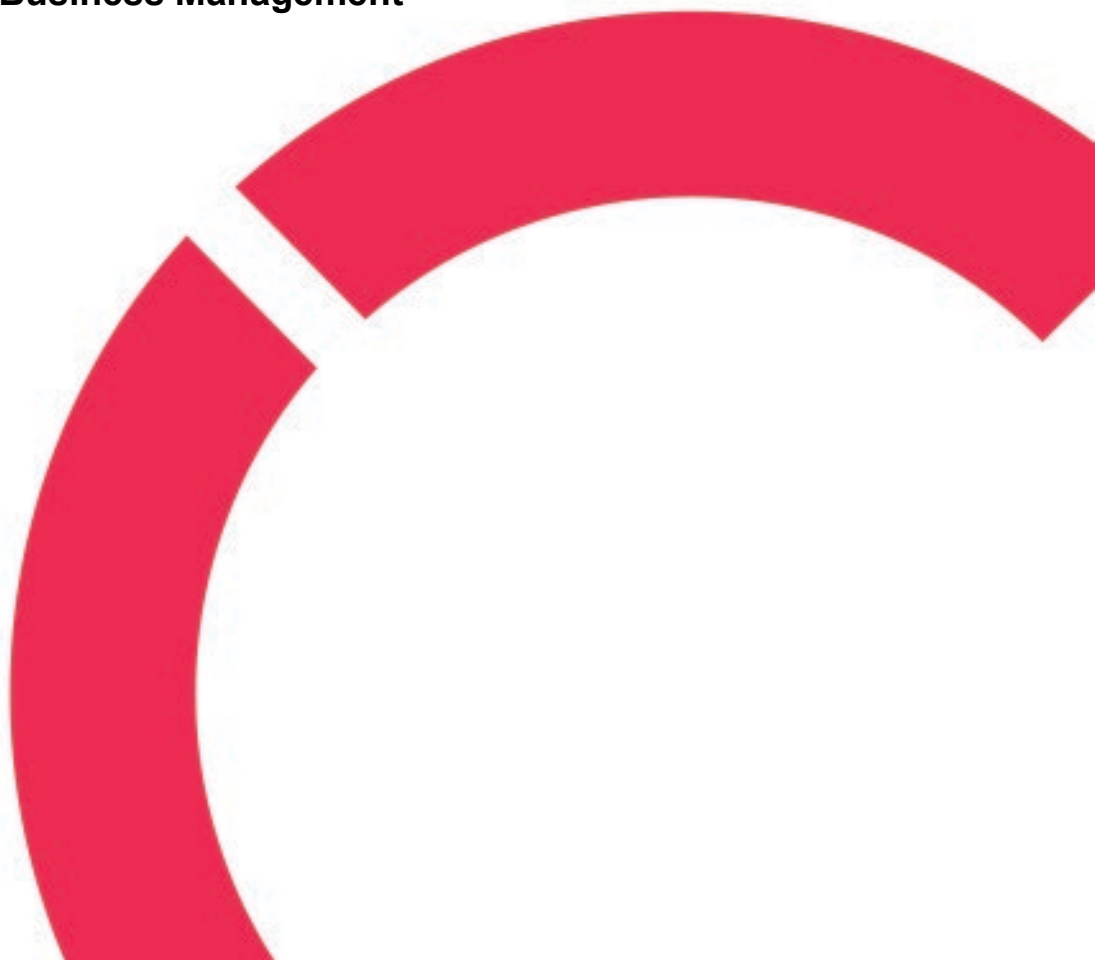## A Case Study of X Company, Finland

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An effective and responsive method for managing an organization's human resources is the human resource information system (HRIS). It consists of data, hardware, software, forms, rules, and protocols. Organizations gather, retain, analyze, and report information on people and employment using HRIS. Although the theoretical relationship between HRIS and organizational performance is well recognized, more empirical research is still required.

The current study intended to investigate how HRIS affects organizational performance in this scenario. Regarding the use of human resources information systems, the effects of developing new conditions on organizational effectiveness and employee performance were specifically explored. The dimensions of HRIS and organizational performance were abstracted through the theoretical framework.

According to the analysis, HRIS significantly improves organizational efficiency and its sub-dimensions (HR functions, time management, cost management, and managerial satisfaction with the system). Considering this, implementing an appropriate HRIS can improve operational effectiveness and the realization of the HR and company strategy, ensuring organizational effectiveness.

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# 1 INTRODUCTION

Effective human resource management is essential for success in the dynamic world of contemporary businesses (Lepak & Snell 1999, 31-48). Human Resources Information Systems (HRIS) represent a cutting-edge technical advancement that has the potential to completely reimagine the foundation of HR administration. These solutions are designed to increase an organization's overall efficiency, reduce the workload associated with manual labor, and streamline HR procedures (Kovach, Hughes, Fagan & Maggitti 2016, 34-43). It is indisputable that HRIS has a significant impact on the complex network of HR tasks. This thesis begins a thorough investigation of how HRIS affects organizational effectiveness, carefully looking at the many factors of this game-changing technology.

The need for HRIS as a mechanism for increased efficiency is more than ever as businesses struggle with the complexities of a quickly evolving global market (Wright & Nishii 2007). According to Kovach et al. (2016, 34-43) this technology advancement revolutionizes the processes of hiring, onboarding, performance reviews, and resource allocation while providing a comprehensive approach to HR management. This study aims to clarify the complex dynamics of HRIS adoption and implementation through in-depth case studies, data analysis, and enlightening interviews with HR professionals.

This analysis goes beyond the improvements that HRIS offers; it also explores the difficulties and restrictions that may arise when integrating HRIS into organizational systems (Beadles, Lowry & Johns 2005, 39-46). Understanding the full range of implications both positive and negative becomes crucial as firms engage more and more heavily in HRIS. Based on a thorough examination of HRIS's subtleties, optimization potential, and best practices, this thesis seeks to present a comprehensive viewpoint on the transformative function of HRIS in improving organizational efficiency (Lepak & Snell 1999, 31-48).

There is no separation between the study of HRIS and the larger theoretical frameworks and assumptions that support HR management. The established ideas and principles of HR management are closely associated with HRIS, a technology-driven solution (Lepak & Snell 1999, 31-48). Through establishing a connection between theoretical foundations and actual data, this study aims to expand on the body of knowledge already available about HRIS and

its capacity to revolutionize companies. The ultimate goal is to provide businesses with priceless knowledge and suggestions for maximizing HRIS's potential as a critical factor in increasing organizational effectiveness (Wright & Nishii 2007).

In accordance with the designated word count and study topic, the author will navigate the complex territory of HRIS as we go through this investigation, looking at its integration, operation, and impact (Beadles et al. 2005, 39-46). The analysis will provide a thorough grasp of how HRIS is changing the contemporary organizational landscape by referencing a wide range of viewpoints, research, and real-world examples. The author will adhere strongly to the instructions and constraints that are provided throughout this project, guaranteeing that the final discussion is comprehensive and perfectly fits the personalized configurations.

The study's objective is to determine the relationship between HR activities via information systems and organizational efficiency in businesses while taking into account the effects of HRIS on organizational efficiency. This study includes a case study of X Company. It is a Finnish technology company specialising in staff recruitment. Their own app has created a completely new marketplace for the workforce and its subscribers. They recruit and place employees in the construction, manufacturing, logistics, property management, hospitality and retail sectors. The goal of this study is to investigate how the use of human resources information systems affects organizational effectiveness and efficiency.

The impact of Human Resource Information Systems (HRIS) on organizational efficiency is explored in detail in the introduction section of this extensive thesis. Its goal is to provide readers a thorough grasp of the research issue and its enormous importance in relation to contemporary organizations. This first chapter provides a context for the other chapters and establishes the overall context of the study project.

Readers will have firmly established their footing in the research journey by the end of this introduction chapter. They will possess a thorough comprehension of the background of the research and the crucial part that HRIS plays in forming the modern organizational environment. The research's current relevance will be apparent to readers as they will recognize the study's significance in the larger field of HR management.

In addition, this introductory chapter will clarify the main goals and the schedule for the upcoming chapters. After reading the Theoretical Framework chapter, readers will be ready to explore the theoretical foundations that inform this research. The profound relationship that exists between HRIS and well-known HR management theories and principles will be revealed, providing a solid theoretical framework for the ensuing investigations.

Readers will be prepared to examine the finer points of the research methodology in the Research Methodology chapter going forward. The tactics and techniques used for data collecting and analysis will be explained in this part so that readers will understand the accuracy and rigor of this study's empirical methodology.

Chapter 4 will offer a perceptive look into the particular company that is being studied, outlining its history, how HRIS is being implemented, and the particular setting that acts as the actual backdrop for this study. Readers will obtain a thorough understanding of the real-world applications of HRIS in a particular organizational context by reading this chapter.

The Analysis and Result chapter, which presents the empirical findings and data-driven insights, will act as a foundation as the research progresses. Through systematic data analysis and interpretation, readers will confront the practical implications and effects of HRIS on organizational efficiency.

The Discussion and Conclusion chapter will serve as the last destination for this research study's expedition. Readers will see here how all the topics covered in earlier chapters have been combined. The author will go into great detail about the research findings' implications, their importance for HR management, and how they might affect organizational procedures. A complete conclusion summarizing the main conclusions and recommendations drawn from the study's in-depth investigation will bring the research study to a close.

## 2 THEORETICAL FRAMEWORK

Technology adoption studies offer thoroughly investigated concepts and frameworks that describe an individual's acceptance of an IT innovation, which is useful in comprehending the effects of an HRIS installation for the impacted employees or prospective system users (Venkatesh, Morris, Davis & Davis 2003, 425-478). This type of study, most often centered on the Technology Acceptance Model (Davis 1989, 319-320; Davis, Bagozzi & Warshaw 1989, 982-1003), offers empirical proof that someone's views about a data system and their mindset toward using it impact the intent to use the mechanism and, as a result, the corresponding usage behavior (Davis 1989, 319-320). Numerous researches have investigated and extensively addressed these correlations (Williams, Dwivedi, Lal & Schwarz 2009, 1-10).

These techniques emphasize the idea that a staff member's mindset toward utilizing an information system, which is described as "an individual's extent of evaluation effect on the intended conduct," is a key component (Davis 1986), is an important variable for forecasting usage patterns. However, it is asserted that this is untrue when attempting to forecast how people will utilize a system in an organization, particularly when utilization is required (Brown, Massey, Montoya-Weiss & Burkman 2002, 283-295). Employees will adopt fresh technology because firms that deploy them insist on their use, despite the fact that they could harbor unfavorable attitudes and views about it.

This means that a person's attitude regarding using a recently deployed information system is not always linked to their intention to use it and its actual application behavior (Brown et al. 2002, 283-295). Additionally, there is a dearth of research on consequences in technology adoption studies. The effects of employees' unfavorable sentiments about an information system are still unstudied (Venkatesh et al. 2007, 268-286). By asking "if the mindset of a worker is not associated with their desire to use technology, what does it influence?" Brown et al. (2002, 283-295) provide a clearer statement of this and go on to state that "attitudes can have an enormous impact on a person's view of the work atmosphere and organization."

The author makes the assumption that there is a correlation between beliefs regarding a newly deployed IS and occupational results like satisfaction with job and willingness to leave

in order to understand the effects of opinions regarding an information system and the general perspective toward utilizing an information system. This claim is consistent with the earlier-discussed phenomena that the adoption of HRIS has effects on individuals. "One way is to assess the desire to turn over as a consequence of the system implementation," (Brown et al. 2002, 283-295), on which our claim is based.

Morris & Venkatesh (2010, 143-161) also emphasized the significance of researching how "the development of technology attributes affect occupational traits and job outputs." The author is able to demonstrate both the anticipated and unanticipated effects of HRIS adoption for HR employees by describing the influence of their views of the newly introduced system on work-related consequences.

The influence of HRIS installations in businesses on staff satisfaction with work and desire to leave the company is explained by an empirical approach in the sections that follow. The theoretical framework is based on studies analyzing work-related effects (March & Simon 1958) as well as the adoption of technology (Venkatesh et al. 2003, 425-478).

## 2.1  Definition and Nature of HRIS

A computer program called a human resource information system (HRIS) assists businesses in maintaining and managing personnel information, including details about hiring, training, salary, and performance reviews. Since it offers an integrated database that enables personnel managers to access, analyze, and report on employee information in real time, HRIS is a crucial tool to administer human resources efficiently.

A human resource information system (HRIS) is necessary for a business to maintain, collect, store, access, and analyze the data it needs regarding its personnel, personnel activities, and organizational aspects. Human resource management (HRM) and information technology are linked through HRIS (Kovach & Cathcart 1999, 275-281).

Modern technological advances have made it possible for offices to become self-service, collaborative, and information-focused (Boateng 2007). The computerized employee record-

keeping of the 1960s has been superseded by more complex reporting and deciding systems in personnel information systems (Boateng 2007). HRIS is therefore an automated process that incorporates software, hardware, support functions, system policies, and procedures to coordinate the strategic and tactical operations of the business's managers and human resources department (Chauhan, Sharma & Tyagi 2011, 58-70).

The definition of HRIS is "a system used to acquire, store, manipulate, analyze, retrieve, and distribute pertinent information about an organization's human resources" (Kavanagh, Thite & Johnson 2009). The authors point out that over the past few decades, HRIS has seen a tremendous evolution, moving from basic data storage systems to complex apps that let HR professionals handle every facet of the human lifespan.

HRIS platforms are accessible to accommodate the particular requirements of businesses across a range of sizes and sectors. For the purpose of handling employee data, for instance, a small business might utilize a straightforward HRIS system, whereas a huge global corporation might need a more complicated system that can handle data from many regions, dialects, and currencies.

HRIS is dynamic and constantly altering in nature. HRIS systems are advancing in terms of user-friendliness, flexibility, and integration as technology advances. The use of HRIS systems by HR professionals to aid in the development of strategies and choices is rising. For instance, using HRIS to examine personnel data can help with succession strategy, identifying trends and patterns, and monitoring the success of training and development initiatives.

In today's fast-paced and changing company climate, HRIS is a crucial tool for managing human resources effectively. It should be noted that "an HRIS can help organizations achieve greater efficiency and effectiveness in their HR practices, thereby improving their ability to compete in the marketplace" (Kavanagh et al. 2009).

## 2.2  Information Management, MIS and HRIS

An instantaneously, information-based, and egoistic collaborative work environment is now feasible thanks to recent technological advancements (Boateng 2007). The advancements proceeded even farther, and as a result, there are already eight hundred thousand petabytes of data in circulation worldwide. With terms like big data, cloud computing, and the internet of things (IoT), these innovations demonstrate that information is now a component of organizational capital and characterize the trends of the data-based economy, which have received a lot of attention recently.

Information's tactical strength and relevance as a prospective investment in capital and the most essential resource of businesses are highlighted by predictions that its volume is expected to exceed 35 zettabytes in 2023. Businesses attempt to base their database management initiatives on this tactic. Customers, staff, and organizational structure are all viewed as forms of capital from this angle.

Acquisition, storage, and transfer are the three fundamental information functions that make up the administration of information (Clarke & Cooper 2000). In order to achieve an organization's very specific goals, information administration is essentially a comprehensive and systematic method linked with identifying, managing, and disseminating all information assets, such as labor's shared knowledge and abilities. Managing information that is important and practical for the organization is the aim of the management of data. When the appropriate information reaches the appropriate location at the appropriate time, productivity within an organization starts to rise (Plunkett 2001).

"Information systems" refer to the technological environments where obtained data is processed, arranged, systemized, exchanged, and integrated in accordance with needs. Organizations employ information technology systems for keeping track of data, and these systems are broken down into three categories: operational process systems (OPS), management information systems (MIS), and expert systems. Human Resources Information System (HRIS) and Decision Support Systems (DDS) are two examples of MIS's modules.

In order to solve complex managerial issues and promote improved efficiency and effectiveness in decision-making, MIS, which converts raw data from both inside and

outside the business into designed and arranged useful information, plays a more significant and successful role in the decision support procedures (Nowduri 2011, 1-8). As a result, MIS is described as an integrated system that facilitates effective decision-making or offers the data necessary for monitoring organizational processes.

According to a different definition, management information systems are computer-based information systems that may combine data from many sources to give the knowledge necessary for managerial decision-making. Automation of MIS has become more prevalent recently. These automated methods have produced a substantial improvement and change in how firms make managerial decisions (Nowduri 2011, 1-8).

HRIS, a component of MIS, is a system of information arranged for monitoring and evaluating existing human resources practices in light of outputs in the post-industrial period. HRIS has risen to the fore as HRM has become progressively more complicated and data-driven in its use in the implementation of all operations, as well as in making choices and preparing for such operations. This system has aided HR executives and employees in determining choices and feedback that are more swiftly, accurately, and successfully.

HRIS is a process allowing a business to gather, store, preserve, update and analyze the data, and prepare associated reports it requires in connection with its own human resources, personnel activities and organizational departments and their features. Besides, HRM can facilitate transition from active and reactive managerial functions to proactive strategic business partnership role by structuring HRIS technology in compliance with the organization culture and using it in a consistent way.

Specialists in human resources have found their work to be easier as a result of greater HRIS utilization, giving them more time to devote to internal consulting projects. According to a different perspective, human resources management specialists improve the businesses' bottom lines while also increasing their stature and influence within the company (Lawler & Morhman 2003, 14-21).

When preserving, organizing, supervising, and managing data connected to human resources, for example, HRIS must give managers and users the necessary and appropriate information (Dessler 2005). Such information provided by Human Resources Information System needs to possess particular characteristics, such as updating, originating from the correct source using the proper techniques, being accurate and exhaustive, and being quickly assessed and submitted to the users via the proper techniques appropriate for the purpose. In the absence of an update, decisions made by managers will not be acceptable.

According to Barile, Pez, Sebasti & Ugarte (2010, 49-54), preserving, updating, categorizing, and evaluating data are made much easier when HR functions are imported into systems within an HRIS, which leads to more quick decision-making in the creation, planning, and administration of HR (Barile et al. 2010, 49-54).

HRIS helps to improve the effectiveness of control processes, which is one of its main advantages. It also has strategic advantages for knowledge sharing, building organizational memory, accelerating decision-making, and fostering a culture of shared values. The use of HRIS by organizations in their HRM operations has also produced benefits in areas like risk administration, financial strategy, management of positions (personnel requirement), records of attendance and their evaluation, staffing planning for promotion, collision reporting and preventative measures, and dangerous substance dissemination reports, in addition to reducing stationary costs and the cost of hiring job applicants.

## 2.3  Importance of HRIS

Companies now understand that maintaining documentation on paper is no longer an effective technique. The most precious resource and the purest form of advantage in competition is human resource management (Wei & Feng 2013). Despite this, it was obvious that there was a disconnect between how HR professionals were allocating their time and energy and what may really affect the achievement of the company and the bottom line.

In the past, HR professionals spent the majority of their time and energy on the level of administration, next on the operational spectrum, and finally on the strategy level. However, doing the opposite will result in an HR value addition. By ensuring that a minimal quantity of time is spent at the management level and that every minute saved is committed to the tactical level, HRIS has the ability to change HR and permit it to deliver value to the business.

The necessity for HRIS is crucial, especially in light of the increased role HR is playing in businesses' strategic planning processes. In order to enable executives to establish the corporate mission, set and carry out ambitions and goals, and establish vital details about the requirements and skills of personnel, a strategic HRIS is required (Chauhan et al. 2011, 58-70). In addition to its ability to be successful, an organization's ability to survive depends on how well the proper data is gathered and applied in order to make the appropriate decisions in the appropriate situations (Nawaz 2012, 1-8).

"Over the last twenty years, firms have grown more dependent on the HR function to offer solutions for leadership that increase the efficiency of human capital" (Hendrikson 2003). HRIS systems have developed into sophisticated instruments that can manage a wide range of data on a company's human capital as well as offer analytical capabilities to aid in management decisions. A well-designed HRIS can be used as the primary management tool to align or integrate the objectives of the HR department with those of long-term business planning (Carrell, Elbert, Hatfield, Grobler, Marx, & Schyf 1999).

Managers must be given HR data in order to support organizational decision-making. Decision Support System (DSS) is the name given to this general idea by Carrell et al. (1999). The capability of the HRIS to quantify, evaluate, and model transformation becomes highly significant with the growing significance of HR concerns as critical components in operational planning as as choice-making (Carrell et al. 1999). While undergoing a transformation process, excellent HRIS competencies can give a company an aggressive and tactical edge.

Organizations are currently thinking about undertaking international HRIS deployment initiatives as a result of the emergence of sizable, attractive, ever-changing, and multinational sectors. The basic HR procedures, including hiring and firing employees, managing benefits,

salary administration, leave administration, keeping track of time, payroll, and talent acquisition linked to instruction, achievement, profession, and planning for succession phases, are supported by a variety of global HR systems (Carneiro 2011, 1-7).

There is no doubt that worldwide HRIS implementation initiatives encounter difficulties due to variations and particularities in various nations and areas, such as linguistic and cultural hurdles.  However, a global HRIS makes it possible for more precise planning and accessible decision-making.  Since the system enables geographically dispersed enterprises to share creative concepts and to foster a sense of cultural cohesiveness and closeness among employees, global HRIS goes above the ability to evaluate and use staff information (Miller 2004).

HRIS has the ability to boost strategy and execution of programs, lower management and HR expenses, improve data precision and collaboration at all levels, and reduce operational and HR costs whether on a worldwide or local level. As a result, the business could gain a competitive edge. Although HRIS has many benefits, a number of problems with the fresh technology that the target City has adopted have an impact on how well managers manage their time, costs, and resources, as well as how well their organization runs. This investigation aims to determine how each of these factors is impacted by HRIS.

## 2.3.1  Impact on Time Management

The way firms handle their human resource functions has been changed by human resource information systems (HRIS). The impact of HRIS on time management is one of its major effects. Time spent on administrative duties like data input, maintaining records, and filing is reduced thanks to HRIS. These tasks take a long time and entail a lot of manual labor. HR professionals may automate these tasks with the help of HRIS, freeing up their time to focus on more important tasks.

The time needed to process requests connected to HR is also decreased thanks to HRIS. Employees can access business policies and procedures, request leaves of absence, and update their own personal data via HRIS. The procedure has been fully computerized with

HRIS, making it quicker and more effective. These inquiries can be handled faster by HR professionals who can respond to them instantly. The hiring process can be automated with HRIS to make it quicker and more effective. Because resumes may be submitted online and job advertisements can be automated using HRIS, it takes less time to analyze resumes and set up interviews.

The time needed to complete performance reviews can be decreased with the aid of HRIS. Performance reviews take a lot of time and laborious physical labor to complete. From setting goals to monitoring progress and giving comments, the entire process may be automated with HRIS. Managers may more easily provide feedback and handle problems as they develop by using HRIS to track staff efficiency in real-time.

HRIS can aid in speeding up the process of completing compliance-related tasks. A large amount of work is spent by HR experts making sure that numerous laws and regulations are followed. HRIS can automate compliance-related tasks including administering benefits, keeping track of vacation time, and making sure labor regulations are followed. HRIS makes it simple to access and report compliance-related data, which cuts down on the time needed to execute compliance-related tasks.

Through the provision of real-time data and analytics, HRIS can aid in enhancing time management. This information can be used by HR professionals to spot patterns, track employee performance, and keep tabs on the status of various HR-related projects. HRIS enables HR professionals to access data instantly, facilitating quicker problem-solving. The use of alerts and notifications from HRIS can also help HR professionals stay informed of pressing problems and take prompt action.

Finally, it can be said that HRIS has a big impact on how time is managed in businesses. HRIS aids in lowering the amount of time spent on administrative chores, automating requests connected to HR, speeding up the process of conducting performance reviews, compliance-related operations, and providing real-time data and analytics. HR workers may concentrate on more strategic tasks thanks to HRIS, which boosts the efficacy and efficiency of HR operations.

### 2.3.2 Impact on Cost Management

It is stated that because the cost aspect is frequently seen as unneeded excessive expenditure, it is becoming more challenging to persuade upper management of the need to reform an inefficient system (Shani & Tesone 2010, 30-48). Shani & Tesone (2010, 30-48) and Ngai & Wat (2006, 297-314) concur that the expense of establishing and maintaining an HRIS can be prohibitive, which is a significant barrier to its deployment. In their study, obstacles to adopting HRIS were looked at, and it was determined that the biggest obstacle was insufficient financial assistance (Shani & Tesone 2010, 30-48; Ngai & Wat 2006, 297-314).

According to Kavanagh et al. (2009) the HRM function is one of the last management roles to be targeted for automation compared to other business functions because of its complexity and data-intensive nature. According to Bussler & Davis (2002, 17-20) HR was the last functional area in an organization to obtain IT budgeting, which is a fair reflection of the low status HR has historically maintained in most businesses.

Before recent years, HR retained a poor position within firms and was frequently seen as a cost center rather than a profit center. Early in installing an HRIS system, organizations may become aware of the cost savings and efficiency improvements, which enables them to offer the convincing justification required to launch a project. One to three years may pass before the investment is recovered, called the payback period (Boateng 2007). HRIS can prevent expensive benefits mistakes, saving businesses money that would otherwise be spent. Additionally, by automating previously labor-intensive tasks, the company will be able to cut expenses. Additionally, the HRIS can be utilized to maintain and facilitate communication throughout the organization (Wiblen, Grant & Dery 2010, 251-267).

### 2.3.3 Impact on Organizational Efficiency

The HRIS research that is now available demonstrates that these applications have different effects on HR depending on the business, but it doesn't really explain why. According to this

argument, HRIS is frequently utilized to automate mundane processes and "replace file cabinets" (Beadles et al. 2005, 39-46).  According to Khera & Gulati (2012, 6-13) a number of authors claimed in their research that HRIS is becoming more prevalent in the strategic choice-making process of the HR. However, different businesses employ HRIS at different levels strategically, and the majority of them still rely on it to replace manually managed procedures and reduce costs (Dery, Wiblen & Grant 2009).

In so far as organizations are unsure of the advantages provided by HRIS, they are hesitant to employ it in practice (Rangriz, Mehrabi & Azadegan 2011, 81-87). One of the most prominent advantages of HRIS is cost savings, along with improved accuracy, timely, and quick retrieval of data (Sadiq, Khan, Ikhlaq & Mujtaba 2012, 77-91). With the recent advancements in information and technology, HRIS has emerged as a fundamental tool for boosting business efficiency and effectiveness, and its goal has grown more comprehensive and complex (Barile et al. 2010, 49-54).

Effectiveness is defined as the degree to which a business achieves its goals, and it is an indication used to determine how much a business gets toward its intended objective by using inputs like labor, raw materials, materials, information, and personnel to some extent and efficiently in the pursuit of the goals. In other words, it is an assessment of the rate at which the strategy's performance targets are being met.

Different aspects of management become implementable with the application of the "system approach" in scientific procedures. Productivity is one of these numerous variables. According to Gibson, Ivancevich, & Donnelly (1991) administration, organization, and effectiveness are all related, and this connections should be defined from three different angles. Successful planning, organization, leadership, and administration are the results of influential individual, group, and company performance. For businesses and organizations, this method is not so simple.

In a dynamic and complex environment, it can be difficult and frustrating for organizations to manage people with varied cultural structures while also accomplishing group and personal objectives and improving organizational effectiveness (Gibson et al. 1991). According to Ekinci and Yilmaz (2002, 35-50) individual and group effectiveness work together to

develop efficiency within the organization. As a result, this effectiveness can be described as institutional and leadership effectiveness in two important managerial fields:

"Managerial efficiency" is a concept that promotes the company's strategy and execution of fundamental managerial procedures like decision-making, tech choosing, and institutional reporting (Issac-Henry et al. 1993). "Organizational efficiency" refers to an adaptable framework that enables simple contact and aids staff in forging stronger bonds with one another and the business, which increases efficiency and effectiveness at work.

It seems as though a number of elements, including data administration and human resource management, have an impact on business effectiveness and productivity. This is supported by a huge number of recent research on the topic. According to Fugate, Stank & Mentzer (2009, 247-264) investigation into the effect of data management procedures on business and organizational achievement with regard to logistic process, there is an important positive connection between knowledge leadership procedures and enterprises and organizational effectiveness (Fugate et al. 2009, 247-264).

In their study of the effects of corporate learning and creative thinking on business performance, Yeung, Lai & Yee (2007, 2459-2477) discovered that a company's primary resilient tactical resource in the twenty-first century is its ability to deal with information effectively in the information-driven economies of that era. They also discovered that there is an essential connection between business learning and creative thinking and the achievement of organizational goals.

McEvily & Chakravarthy (2002, 285-305) made their argument that knowledge of the technology used centred around information business performance in the worldwide marketplace of the digital age along with the integration of the understanding in the organization's main output process for development may help to increase the company's effectiveness and gain an edge over competitors.

According to Argote and Ingram (2000, 150-169), an exchange of knowledge and infrastructure that facilitates interactions within the business would make information

sharing more accessible. This quality would then enhance business learning and strengthen the efficiency of the organization (Argote & Ingram 2000, 150-169).

According to Gold, Malhotra & Segars (2001, 185-214) the process of unexpectedly altering conventional hierarchies with a long history is difficult. Managers' reluctance and information management in based on information organizations are related to the skill of managing information, and information administration structures and the processing of information process are important (Gold et al. 2001, 185-214).

" Achievement of creating value" in the online marketplace of the modern era of information relies on their relationships with all employees, customers, suppliers, and shareholders, along with the "knowledge" they originate from these relationships, and that organizations which keep additional data or succeed in safeguarding the information more are going to boost their market value. Information-based structures of organization and data administration are what make up businesses in this data-driven economy.

HRIS can stop the expensive mistake that happens when it comes to community advantages and spare the company from the associated costs (Johnson & Gueutal 2011). By automating the formerly labor-intensive procedures, Wiblen et al. (2010, 251-267) argued that HRIS would reduce administrative expenses, maintain encourage interaction from the lowest to the highest levels of the business, and be a tool that increased efficiency (Wiblen et al. 2010, 251-267).

An organizational structure, such as a human resources database, has become a proactive tool for developing an easier relationship between personnel and the business and among themselves, as well as the exchange of information, collaboration (team spirit), and internet user culture, which leads to more efficiency and enhanced performance at work. This is especially true in an era where internationalization is perceived as deregulating and becoming unimpeded.

According to Barile et al. (2010, 49-54) an efficient HRIS is necessary in modern businesses to address issues like growing business expectations, a broader application of information, and greater need for information, as well as the ongoing pressure to cut costs

and transform HR into a more proactive company partner. They also claim that HRIS has turned into a crucial tool for improving company efficiency and productivity (Barile et al. 2010, 49-54).

HRIS is an approach to the issues that businesses face in order to deliver cost effectiveness, lessen management job stress, uniform HR processes, or simply add the strategic benefit to the decision-making activity of the company as a whole. There is general agreement that, among other practices, HRIS is a very successful instrument for enhancing an organization's efficacy, and consequently it's HR sufficiency and overall effectiveness (Kumar & Parumasur 2013).

Brown (2008) recognized the effectiveness of HRIS to its capacity to produce findings that are more speedy and effective than those on paper. He cautioned that while implementing an HRIS may be seen as a necessary step for an organization, doing so may actually work against efficiency if the system is not a useful tool for HR tasks (Brown 2008).

In a business, fundamental managerial activities like executive decision-making, technology choosing, and administrative reporting structures are supported by strategy and execution from a successful HRIS. As a result, HRIS has evolved into a tool that actively encourages workers to build relationships with their employers and with one another, increasing their efficiency and effectiveness at work (Beadles, Lowery & Johns 2005, 39-46).

The performance of the business can be increased when HR departments operate through a web portal and provide a wider range of more useful services. Because most businesses have automated their present HR activities but have not advanced to a more advanced information culture stage, they must make full use of the HRIS (Beadles, Lowery & Johns 2005, 39-46). While HR managers stress the need to comprehend the factors contributing to the achievement of HRIS better, Al-Shibly (2011, 157-169) notes that few businesses consistently seek to measure the effectiveness of their data management system. Because HRIS can provide results more rapidly and efficiently than dealing with paper, it is far more efficient than paper-based systems.

A firm may view the implementation of an HRIS program as a crucial step, but if the program is not a useful tool for HR operations, it won't boost efficiency and might even have the opposite effect. For today's enterprises to deal with a variety of issues, including increasing organizational expectations, a higher usage of and need for information, continual lowering expenses challenges, and a requirement to make HR a more strategically important partner, an effective HRIS is essential, according to Barile et al. (2010, 49-54) The purpose of HRIS has expanded and become more complex in the last few years, and it has become an essential facilitator for enhancing business efficiency and productivity.

The use of an HRIS can help an organization become more cost-effective, reduce its administrative workload, standardize its HR procedures, or simply add strategic value to its decision-making. HRIS is a powerful tool for boosting an organization's HR competency, according to a wide consensus among practitioners. In the opinion of Shani and Tesone (2010, 30-48), implementing an HRIS is expected to elevate HR to the predicted role of a strategic partner in the firm. One of the key factors influencing the role of the HR function at the moment is HRIS. According to Bussler & Davis (2002, 17-20) the Human Resources (HR) unit and its structure of support became critical partners in navigating transformation within a corporation, ushering in a new era.

Efficient HRIS provides support for the planning and implementation of key managerial procedures in the company, including executive decision-making, technology choosing, and institutional reporting structures. Because of this, the new HRIS system evolved into a proactive tool to help employees engage with the company as well as each other more easily, resulting in higher productivity and more effective business performance (Beadles, Lowery & Johns 2005, 39-46).

### 2.3.4 Impact on Managerial Satisfaction

According to research, the HRIS is a vital tool for managers and helps them be more productive (Barile et al. 2010, 49-54; Kovach & Cathcart 1999, 275-281). According to Barile et al. (2010, 49-54) the HRIS allows for flexible interaction, helps people do their jobs and boosts production. Additionally, it was discovered that users are anticipated to use a system

more frequently if they believe it to be simple to understand and operate. According to Shani and Tesone (2010, 30-48) professionals can use the HRIS to enhance their performance by learning more about the company and its employees, making it easier for them to participate in strategic planning and implementation.

Additionally, according to Shani and Tesone (2010, 30-48) HR managers can use HRIS to assess their own company's performance (by, for example, calculating the return on training investments and turnover costs) and present this data to upper management as proof that HR is a legitimate strategic partner and essential to achieving organizational objectives.

But according to studies, a vital issue with installing an integrated HRIS is losing a personal touch in employee communications (Barile et al. 2010, 49-54). Due to automation and employee self-service portals, depersonalization is recognized as a trade-off. Additionally, academics predict that people's perspectives on the nature and function of HR may alter in the future due to the growing use of information technologies in HR planning and delivery (Kavanagh et al. 2009). HR managers may believe that technology (HRIS) lowers their position inside the company, which may impact how they view their work and profession. However, many HR professionals believe that HRIS has more advantages than disadvantages.

## 2.4  The Concept of Employee Performance and HRIS Impact

To make it possible for employees to properly grasp and appreciate what is required of them in the organization, the foundation for achievement assessment is the clear definition of business procedures and objectives to be reached. Effective legislation, union movements, corporate culture, and performance evaluation systems are among the main environmental elements impacting a company' internal and external surroundings as well as the performance of staff members. According to Bach (2000, 254-258) these variables may promote or inhibit an employee's high level of inspiration, effectiveness, and output.

The ability of corporate entities to achieve their tactical objectives depends on their ability to employ and utilize their human resources effectively in the modern business climate, where

the competitive edge has gained more relevance and value than competitors. The businesses of today must operate in an extremely competitive atmosphere that has never been seen before. Being supercompetitive and unique in such a setting is largely made feasible by fully capitalizing on the knowledge, abilities, and talents of the company's human resources and maintaining their inspiration and positive attitude toward the job, or by employing these resources sparingly yet successfully and effectively.

Exactly at this moment, human resources management enters the picture and actively contributes to demonstrating how staff members can perform and function more effectively as well as attain greater morale, inspiration, happiness, and wellness in order for organizations to achieve what they want to accomplish in line with their strategy of "think globally, act locally".

Employees' Competence is the assistance of the workforce to the corporate objectives. It demonstrates how effectively the staff members carry out their jobs and obligations. The individual who performs well has successfully carried out his tasks and obligations, and as a result, his actions support the objectives of the company. The evaluation of performance evaluates the contribution of the workforce to the achievement of organizational objectives.

Almost all organizations have had high success as a shared goal across history. In an effort to attain this goal, they have employed corporate resources, particularly human resources, but at varied speeds and in different ways. The evaluation of achievement (success) is the most important success indicator for human resources. Throughout history, and especially in relation to the scale of the company, different methods of evaluating staff performance have been used. Small and medium-sized organizations cannot attain personal and business success if the assessment is not conducted using global scientific methodologies.

A significant issue in firms is the employee performance review process. In this regard, it's critical to determine how well employees carry out the tasks given to them or what abilities and skills they possess. The subsequent three criteria, in Ivancevich's opinion, determine how well a job candidate performs at work (Ivancevich 1990).

### 2.4.1  Opportunity to Perform

The tools and settings needed to complete a task are called opportunity to perform. Where these conditions are not met, it would nevertheless remain hard to see excellent staff efficiency. The impact of these opportunities lies in the prospect they offer for growth, learning, and recognition. They can be key moments in an individual's or group's journey, granting a platform to stand out, gain feedback, as well as progress further in their respective fields.

### 2.4.2  Willingness to Perform

The staff member's enthusiasm and desire, which are necessary for the work that has been allocated to him, are the third crucial aspect that has to do with whether or not they exist. With the appearance of information age organizations and the evolving nature of competition, where every detail can change at any moment and knowledge is treated as a valuable resource in tandem with the ensuing advancement of technology for communication and information, the importance of information craftsmanship is growing.

Businesses may be forced to battle in order to locate, keep, and obtain the maximum performance from competent human resources on the labor market who possess the necessary traits to demonstrate outstanding achievement and an eagerness to work. Organizations that provide a desirable work environment, evaluate staff effectiveness objectively and effectively through an open system using HRIS digitization, and use promotion, wage, and incentive programs would all help to improve their efficiency.

According to Bailey & Pearson (1983, 530-545) the use of HRIS in HR would lower the costs associated with automating information and the total number of employees while still encouraging workers to verify their own information. Bailey also noted that HRIS managers would have easy access to the pertinent information and data, which would enable them to conduct analyses, make decisions, and interact with others without seeking the advice of HR specialists (Ammarhusien 2015, 10-15; Bailey & Pearson 1983, 530-545).

Even if the return on investment (ROI) and other tough metrics are part of the ideal HRIS evaluation, external factors make this kind of success assessment challenging, if not impracticable. As a result, user perception and happiness with the system are frequently used as proxies to assess the performance of the system (Ammarhusien 2015, 10-15).

According to the research study on HRIS Use and Impacts by Hussain, Wallace & Cornelius (2007, 74-89) there are certain typical distinctions between the use of HRIS in small and large businesses when it comes to estimating its scope and functional and conceptual use. Additionally, they demonstrated that, despite the fact that HR professionals are trained in specific HRIS usage thanks to the interdisciplinary strategic collaboration, they had less experience than people in different industries (Hussain et al. 2007, 74-89).

In the research they conducted on the efficiency and acceptance of Human Resources Systems and factors influencing these, Stone, Stone-Romero, & Lukaszewski (2006, 229-244) showed the significance of people's and e-HR system attributes on four significant performance indicators (information flow, social relationships, a sense of control, and system acknowledgment), and they provided a variety of models (Stone et al. 2006, 229-244).

### 2.4.3  Capacity to Perform

Personnel must possess the information, abilities, and experience necessary to perform the job. A staff member who is unsure about how to conduct their job and what to do cannot be expected to function at a high level.

# 3  RESEARCH METHODOLOGY

The term "research methodology" describes the methodical approach and procedures used by researchers to plan, carry out, and evaluate their studies. The research process is directed by the road map, ensuring that data gathering and analysis are thorough, valid, and dependable. The choice of the best research methods (qualitative, quantitative, or mixed), the formulation of the research questions or hypotheses, the definition of the study objectives, the strategies for sampling, data collection, and data analysis are all important elements of research methodology.

## 3.1  Types of Research Methods

The nature of the research and the particular research questions often influence the use of qualitative and quantitative research methods, which are essential methodologies in the social sciences with unique features and uses. The focus of qualitative research is on investigating complicated phenomena by carefully examining experiences, narratives, and surrounding circumstances. In qualitative research, methods including content analysis, observations, and interviews are frequently used. In order to provide rich and descriptive insights that are perfect for comprehending the "how" and "why" of human behavior, this method seeks to reveal underlying meanings and patterns within the data.

On the other hand, quantitative research uses statistical analysis and numerical data to look for trends, correlations, and generalizability. In order to establish empirical facts, test hypotheses, and make predictions, it usually entails surveys, experiments, and structured observations. This approach generates numerical data, which makes it very useful for conducting extensive research and looking at correlations between various factors.

The study topic and objectives inform the decision between qualitative and quantitative research methods. To get a deeper knowledge of complicated events, researchers frequently use a mixed-methods strategy that combines qualitative and quantitative methodologies. (Creswell & Creswell 2017.)

Depending on the research topic and research aim, the author will use the qualitative research method to complete the study. In the subsequent stages the author will explain why this research method was chosen in the thesis and how it will be done.

## 3.2  Qualitative Research Method

In-depth examination of the experiences, viewpoints, and behaviors of individuals or groups is the goal of qualitative research, a method for examining and comprehending complex phenomena. Researchers that conduct qualitative research look for patterns, themes, and insights in the detailed, context-specific data that participants have provided. Examining subjective experiences, cultural contexts, and social dynamics are some of the topics that this methodology is particularly useful for. Open-ended questions are a common technique in qualitative research because they let participants express their ideas and emotions in their own words.

Group interviews, focus groups, telephone interviews, and electronic (online) interviews are only a few of the interview forms that have been described for use in qualitative research. Initiate the word "electronic interviews" to refer to both offline and online interviews that are done in real time over the internet or an intranet. This electronic interview group is further divided into synchronous and asynchronous subgroups by them. (Morgan & Saymon 2004; Creswell & Creswell 2017)

To provide a deeper knowledge of the phenomenon being investigated, the researcher's position in qualitative research is that of an active witness and interpreter. Findings from qualitative research are frequently presented through stories, quotations, and thematic analysis, giving a comprehensive view of the subject being studied.

## 3.3  Purpose of Qualitative Research

New ideas or theories may be advanced by qualitative research, especially in areas where the amount of knowledge is divided or limited. Finding connections, relationships, and

patterns that can act as the foundation for subsequent quantitative or mixed-methods research is made easier by this technique (Charmaz 2014). This thesis uses qualitative research to provide a thorough and nuanced understanding of how much the HRIS enhances organizational effectiveness as determined by its effects on HR functions, time management, cost management, and managerial satisfaction with the adoption and use of Human Resource Information Systems (HRIS) within organizations. In this situation, qualitative research is crucial for the following reasons:

### 3.3.1  Exploration of Human Experiences

Qualitative research enables researchers to delve into the opinions, attitudes, and experiences of staff members, Human Resource (HR) specialists, and other stakeholders about the adoption of Human Resource Information Systems (HRIS). The results of this investigation may shed light on how Human Resource Information Systems (HRIS) affects employees' daily productivity, job satisfaction, and general effectiveness.

### 3.3.2  Understanding the Context

Qualitative research considers the organizational setting in which HRIS operates. It assists in identifying certain organizational difficulties and exceptional situations that influence the deployment and use of Human Resource Information Systems (HRIS), shining light on the context-specific efficiency implications. The initial goal of contemplating this organizational context is to focus on the diverse and context-specific consequences Human Resource Information Systems may have within a particular setting. It's about understanding the degrees and difficulties that can either facilitate or hold back the successful implementation and functioning of HRIS within an organization.

### 3.3.3  Identification of Unexpected Outcomes

In contrast to quantitative research, which frequently concentrates on predetermined factors, qualitative research allows for the discovery of unknown or unintended outcomes of Human Resource Information Systems placement. This identified unexpected outcomes could be useful tools for corporate decision-making. It is one of the major purposes of qualitative research methods.

### 3.3.4  Rich Data Collection

Qualitative research uses techniques like interviews to gather rich, narrative data that can be used to illustrate how HRIS affects organizational effectiveness with examples and tales taken from real-world situations. Qualitative research methods permit researchers to paint a intense picture of how Human Resource Information Systems operate within a real organizational setting. These storylines and patterns help in understanding the practical implications and tones of HRIS, offering a deeper understanding beyond ordinary statistics or quantitative data.

### 3.3.5  Contextualized Recommendations

Qualitative findings can result in recommendations for HRIS optimization that are tailored to the particular situation, providing organizations wishing to increase their HRIS efficiency with useful information. Integrating qualitative research on HRIS and organizational effectiveness aims to offer a comprehensive, human-centered viewpoint that goes beyond quantitative metrics. This strategy intends to capture the complex effects of HRIS on people and organizations, which will ultimately lead to better decision-making and the development of HRIS practices in the business world.

### 3.4  Types of Interviews

Interviews are a popular and effective data collection technique in qualitative research. They make it possible for researchers to extract detailed, rich information from individuals. In

qualitative research, there are numerous types of interview processes, each with unique features and objectives.

### 3.4.1  Structured Interviews

Structured interviews generate data that is easier to evaluate as the questions and response categories are consistent, which simplifies the coding and analysis process especially when working with big sample sizes (Flick 2018). In qualitative research, a predetermined set of questions and response alternatives are used in a structured interview, a method of data collection. It is a methodical and meticulously prepared way to collect data from participants. In structured interviews, researchers employ a set of questions that are always asked to participants in the same order. Structured interviews provide less flexibility for the interviewer than other interview formats.

### 3.4.2  Semi-Structured Interviews

In qualitative research, semi-structured interviews are frequently employed as a data collection technique. They provide a versatile and adaptive method for getting detailed, rich information from participants. The flexibility offered by semi-structured interviews enables the interviewer to explore new avenues of inquiry or go deeper into participants' experiences, which can produce data that is richer and more complex (Bryman 2016). Semi-structured interviews are characterized by a compromise between structure and flexibility. While there is a predetermined set of fundamental questions, researchers are permitted to ask additional questions and delve deeper into particular subjects in response to participant responses.

### 3.4.3  Unstructured Interviews

The flexibility and open-ended nature of unstructured interviews distinguish them as a qualitative research technique. Unstructured interviews, in contrast to structured or semi-structured interviews, do not adhere to a planned list of questions or a predetermined order.

Instead, they enable natural, participant-driven dialogues. The greatest degree of flexibility is provided by unstructured interviews, which let the interviewer delve into novel subjects, pursue fresh avenues of investigation, and customize the discussion to each participant's particular experience (Creswell 2013).

When researchers want to investigate complicated, multifaceted phenomena or topics, unstructured interviews are useful. They are especially helpful for getting a thorough knowledge of the experiences and perspectives of participants. Though there is no set format for unstructured interviews, data analysis might be difficult. Deep theme analysis and coding are required of researchers. Unstructured interviews can take a lot of time and resources, especially when there are a lot of individuals involved.

### 3.4.4  Narrative Interviews

A research method called narrative interviews is used to gather in-depth, conversational accounts of people's life experiences and tales. Their goal is to comprehend each person's viewpoint and the background of their experiences. To encourage participants to share their experiences and offer reflections, these interviews are frequently conducted in an open-ended and flexible manner. (Fontana & Frey 2005, 695-727.)

The storytelling process is the focus of narrative interviews. Participants are encouraged to tell stories about their experiences, frequently describing the beginning, middle, and end of their tales. Open-ended and exploratory questions are used in narrative interviews. Narrative interviews are used when researchers want to comprehend the life tracks of people, looking at how experiences, relationships, and events have developed over time. Narrative interviewing and transcription can take a lot of time, especially when looking at life histories.

### 3.4.5  In-Depth Interviews

One-on-one discussions between a participant and a researcher are the basis of in-depth interviews, a type of qualitative research methodology. Acquiring a thorough grasp of the

participant's viewpoint, experiences, and beliefs about a specific subject is the main goal (Smith 2015). The complete and in-depth investigation of a particular topic, problem, or phenomenon characterizes in-depth interviews as a qualitative research approach. In-depth exploration of the participants' experiences, viewpoints, and insights is the goal of these interviews.

When a researcher needs a thorough grasp of a particular research topic, particularly one that is complicated or multifaceted, they use in-depth interviews. Due to the freedom to completely express themselves and share their experiences, participants frequently report feeling empowered throughout these interviews. It might take a lot of time and effort to conduct an in-depth interview, especially if there are a lot of participants.

### 3.4.6  Group Interviews

Focus groups, also known as group interviews, are conversations or structured discussions about a particular study topic or question between a group of participants and a moderator (Krueger & Casey 2014). The objective is to gather information through participant engagement and idea sharing. These conversations offer perceptions into group dynamics, shared attitudes, beliefs, and perceptions.

Focus groups bring together a small number of participants for a structured discussion facilitated by a facilitator or moderator. Typically, these groups consist of six to twelve people. Successful focus groups depend on effective moderating. To control group dynamics, guarantee balanced participation, and successfully moderate the conversation, skilled moderators are required.

### 3.4.7  Phone Interviews

To gather data from participants remotely for both qualitative and quantitative studies, phone interviews are a popular research technique. They provide an easy approach to get data and insights without having to speak with people in person. A phone interview is an organized or

semi-structured discussion between a participant and a researcher that takes place over the phone. They are employed in surveys, expert consultations, and qualitative interviews to gather information on a range of subjects. (Opdenakker 2006, 3-14.)

Depending on the study goals, phone interviews might be either semi-structured or fully structured. To ensure proper data collection and analysis, researchers frequently record telephone interviews. This recording enables detailed analysis and accurately transcript. Telephone interviews give researchers the ability to connect with participants over vast geographic distances. Telephone interviews allow for scheduling flexibility, making it simpler to match interviews with participants' schedules. Lack of nonverbal indicators like body language and facial expressions in telephone interviews might make it more difficult to fully comprehend and interpret responses.

## 3.5  Measuring Instrument

The semi-structured interview questions are directly related to the HRIS effects on HR functions, how the HRIS affects time management, how the HRIS affects cost management, managerial satisfaction with the HRIS, how the HRIS affects the organizational efficiency. The interview questions were developed based on identifying related topics that appeared during the theoretical framework.

# 4  CASE STUDY: X COMPANY

The author has selected X Company as the case company because the author has been working with it since May 2023. As an employee, the author must use the company's app which is used as a tool for Human Resource Information Systems (HRIS). After having discussions with companies' HR personnel, the author has chosen X Company as the case company.

## 4.1  About X Company

Recruiting employees is the area of expertise for this Finnish technology company. A brand-new market for the workforce and its subscribers has been established by their own app. Construction, manufacturing, logistics, property management, hospitality, and retail sectors are just a few of the industries that they recruit and place workers.

Since their establishment in 2017, the company has had remarkable growth, with over 100 million in sales already achieved in 2023. In addition to becoming a leader in their own field, the company's objective has been to improve the staffing industry's reputation.

Employees can view job openings, apply for the positions they're interested in, and accept job offers from clients using the companies' own app. Customers may now book shifts and immediately invite a trusted employee to a job by the company's own app.

Even in the event of a sharp increase in demand, the company can meet the customer's needs swiftly with the help of the app. High levels of customer satisfaction are a reflection of their serious approach to working with their clients.

## 4.2  Geographical Presence

In 22 cities across Finland, the company has deliberately developed a presence. Major cities including Helsinki, Tampere, Turku, and Oulu are included in this broad network. Due to the

company's extensive geographic reach, it can effectively serve businesses all throughout Finland and is positioned as a major role player in the staffing sector.

## 4.3  Key Statistics of X Company

The company has achieved success and had an impact on the staffing sector, as evidenced by these amazing statistics:

The business has a team of over 150 recruiters who are committed to linking qualified candidates with suitable employment opportunities. Clients gain top-notch staffing services from this expertise. In 2022, X Company served over 10,200 employees for their customers, demonstrating its capacity to meet the various staffing requirements of companies across numerous industries.

With more than 1,900 happy clients, X Company has developed a reputation for offering superior staffing solutions and upholding high standards of client satisfaction. The company provides job openings across a variety of industries, including manufacturing, retail, hospitality, real estate services, logistics, and construction. The company's dedication to accommodating the requirements of its customers and job seekers is evidenced by the variety of options it offers.

In the Finnish labor market, X Company has established itself as a reliable and important partner for both job seekers and businesses. Each group benefits greatly from the company's offerings. The company has generated countless job openings across numerous sectors, giving job seekers the freedom to look for roles that match their qualifications and professional goals. For job seekers looking for financial security, company ensures that employees receive fair compensation, making it a desirable alternative.

X Company have their own user-friendly app that streamlines the hiring process and makes it simple for job hunters to handle their employment-related details. Applications, interactions with employers, and monitoring work assignments fall under this category. They offer prizes for five-star ratings to reward excellence. Employees are encouraged by this motivation to

achieve in their jobs and favorably impact their companies. Through the app, job searchers can build and manage professional profiles that will make them more visible to employers and increase their chances of landing coveted opportunities.

X Company provides a complete staffing solution, guaranteeing that organizations have access to a dependable and effective workforce. To achieve their operational needs, organizations depend on this reliability. The organization ensures that employees receive their salaries on schedule, relieving the employer of any payroll-related worries. Payroll accuracy is essential for building employee trust and satisfaction.

Through the app, employers can manage workforce-related issues effectively. This entails managing worker performance, coordinating with personnel, and setting shift schedules. Employers can turn to the company for help with any problems or inquiries they may have regarding their staff. Guidance on employment-related issues, labor legislation, and best practices are all included in this service.

## 4.4 Analysis and Result

The study focused on the impact of Human Resource Information Systems (HRIS) on organizational efficiency. According to the study HRIS is important for enhancing HR related activities, cost management, time management and managerial satisfaction. However, there are some difficulties and drawbacks with HRIS such as challenges to efficient use of HRIS and difficulties to deploy HRIS.

The study applied the qualitative research method, incorporating phone interview, structured, semi-structured and unstructured interviews of the HR personnel of X Company to in-depth analysis of the impact of HRIS on organizational efficiency. In this case study qualitative research method was used to know how organizations perceive and utilize HRIS, as well as how HRIS improves HR functions, cost management, time management and managerial satisfaction.

Rendering to the study, qualitative research methods were useful for the opportunity to discuss interviewees' experiences, perspectives, and insights regarding the impact of HRIS on organizational efficiency, in more detail.

## 4.4.1  Analysis

Researchers can analyze a dataset using a wide range of possible qualitative analysis techniques. Popular options include, for instance, discourse analysis, narrative analysis, and content analysis. When looking for subjective data, such as a participant's experiences, ideas, and opinions, thematic analysis is very helpful. That's why data from interviews are frequently used for thematic analysis. Another way to choose whether to employ theme analysis is through research questions. In summary, theme analysis is a wise decision, particularly for those who are curious about subjective experiences.

Inductive and deductive are the two broad methods of thematic analysis. The strategy that is employed will be determined by what makes the most sense given in the study goals and inquiries.

With the inductive approach, meaning is assumed, and themes are generated from data without any prior assumptions. Put differently, the researcher would approach the analysis blindly, letting the codes and themes come to light as they did so from the data. When there is less prior study on the subject of interest, the inductive approach is most appropriate for exploratory research goals and questions.

A deductive strategy, as opposed to an inductive one, entails beginning the study with a predetermined set of codes. This method is typically based on current theory, empirical study, and/or past knowledge. The deductive technique works best when there is a wealth of prior research on the subject of interest and when the goals and questions of the study are confirmatory in nature.

The researcher must choose the level of content the analysis will focus on, either the semantic level or the latent level, regardless of whether the researcher uses the inductive or deductive technique.

Semantic analysis takes things at face value and overlooks the underlying meaning of the data, identifying themes primarily from what is spoken or written clearly. On the other hand, a latent-level approach examines the motivations behind semantic information and focuses on the underlying meanings. Furthermore, a latent approach incorporates an element of interpretation that is, interpretations are posited in addition to taking the facts at face value as opposed to the semantic approach.

The kind of data being analyzed and the goals of the research will determine which approach to utilize when. For instance, the researcher might decide to adopt a deductive method with a semantic-level focus if the goal is to analyze clear viewpoints expressed in interviews and the researcher is aware of what the researcher is searching for in advance.

On the other hand, an inductive technique can be chosen with a latent-level focus if the researcher is trying to uncover the underlying meaning that focus group participants are expressing and the researcher doesn't know what to expect (Crosley 2021).

Here the author will use deductive method with a semantic level to analyze data with relation to the goals of the research and to analyze clear viewpoints expressed in interviews.

Theme 1: Improved Efficiency in HR Functions

Questions 1, 2, and 3 are all about the efficiency of HR functions. Responses emphasize how HRIS has improved the accuracy of recruitment, enhanced onboarding procedures, and streamlined performance appraisals. The theme here is that HRIS is seen as a tool that positively impacts HR processes. Ultimately, the theme emphasizes how HRIS functions as a technologically driven mechanism, improving HR operations through procedure simplification, accuracy improvement, and overall increased efficacy and efficiency.

HRIS has improved the accuracy and efficiency of our recruitment process (Interviewee 1).

HRIS has simplified candidate tracking and the application review process, resulting in quicker and more accurate hiring decisions (Interviewee 2).

Theme 2: Time Management Benefits

Questions 5 and 6 focus on time management. Responses imply that HRIS has reduced the time required for administrative tasks and enhanced the communication of HR updates. Theme emphasizes the critical role that HRIS plays in helping organizations optimize their time management procedures. In addition to increasing productivity and satisfaction among employees, HRIS also lessens administrative duties and speeds up communication.

Definitely, HRIS has reduced the time spent on administrative tasks, allowing HR staff to focus on more strategic activities (Interviewee 3).
The HRIS has accelerated the communication of important HR updates to employees (Interviewee 4).

Theme 3: Improved Employee Relations

Questions 7 and 16 trace on how HRIS has contributed to faster resolution of employee concerns and positively impacted managerial decision-making. Responses suggest that HRIS can enhance employee relations and support decision-making processes. All things considered, the "Improved Employee Relations" theme emphasizes how HRIS helps to make decision-making and employee issues more data-driven and responsive, which in turn fosters better, more favorable employee relations.

Through our HRIS employees can inform work safety issues and also discuss with our authorities to resolve the issues (Interviewee 1).
HRIS has provided managers with valuable data and insights, which have positively impacted decision-making, particularly in areas such as workforce planning and talent management (Interviewee 3).

Theme 4: Cost Management and Resource Optimization

Questions 9, 10, 11, and 12 are concentrated around cost management. Responses reflect that HRIS has reduced paper usage, lowered expenses associated with manual record keeping, optimized resource allocation, and controlled recruitment-related costs. The "Cost Management and Resource Optimization" theme focuses on how HRIS is an affordable solution that increases overall financial efficiency inside an organization by optimizing resource allocation and lowering operational expenses.

I think HRIS has not only saved on printing costs but also contributed to our environmental sustainability efforts (Interviewee 2).
HRIS has helped us lower expenses related to manual record keeping and storage, as it offers a more cost-effective and space-efficient solution (Interviewee 3).

Theme 5: Managerial Satisfaction

Questions 13, 14, and 15 make inquiries about managerial satisfaction. Responses express their strong agreement that HRIS meets or exceeds expectations in improving HR functions, time management, and cost management. The theme of "Managerial Satisfaction" evaluates how HRIS meets the needs of managers in terms of improving time management, cost management, and HR functions. The success of HRIS in supporting managerial tasks and responsibilities is indicated by the high levels of satisfaction observed in these areas.

HRIS has exceeded our expectations in terms of time management, allowing us to accomplish tasks more quickly and efficiently (Interviewee 3).
I am very satisfied with the overall performance of the HRIS in improving HR functions (Interviewee 4).

## 4.4.2  Result

The results of the thematic analysis show that HRIS is seen as an important instrument that enhances organizational effectiveness and a number of HR management aspects. Its perceived worth inside the firm is influenced by its capacity to meet managerial expectations,

develop improved employee interactions, optimize cost management, improve time management, and increase HR activities.

These results highlight the complex role that HRIS plays in helping managers and HR specialists accomplish their goals and improve organizational effectiveness. Furthermore, the study reveals that efficient use of HRIS in an organization can enhance overall organizational performance like business growth, proper allocation of resources, large number of employee management, customer satisfaction and smooth managerial functions.

# 5 DISCUSSION AND CONCLUSION

The utilisation of Human Resources Information Systems (HRIS) in modern corporate management signifies a notable shift in the manner in which HR activities are carried out. By leveraging technological advancements, this solution has the potential to enhance organisational effectiveness through the optimisation of HR procedures and the reduction of manual labour. This thesis investigated the influence of Human Resource Information Systems (HRIS) on the overall effectiveness of organisations. To do this, an in-depth case study of ABC Company was conducted, supplemented with interviews with their HR personnel.

The consolidation of data derived from the case study and interviews interprets a profound understanding of the impact of Human Resource Information Systems (HRIS) on enterprises. Consensus was reached among all interview participants about the significance of HRIS as a pivotal instrument for enhancing operational effectiveness. The utilisation of this technology to optimise and mechanise human resources processes is perceived to have a beneficial and groundbreaking impact on organisational efficiency.

However, the results of the study did bring attention to several limitations and challenges associated with the integration of Human Resource Information Systems (HRIS). Organisations are required to confront these challenges directly and adopt a proactive approach. In order to progress, it is imperative to identify and rectify any existing problems, ensure comprehensive training for staff, and primarily synchronise the HRIS system with the distinct demands of the organisation.

In light of several factors, this study offers a perspective on the perception and impact of Human Resource Information Systems (HRIS) within organisations, specifically in relation to enhancing organisational effectiveness. The introduction of HRIS holds significant promise for enhancing overall organisational performance through its emphasis on accurate execution and customization tailored to the unique requirements of each entity. However, in order to actualize this potential, organisations must allocate a substantial amount of resources, both in terms of time and financial investment, towards Human Resource Information Systems (HRIS).

The presented overview of findings provides empirical support for the theoretical framework of the thesis and affirms that the incorporation of HRIS aligns with the existing body of literature on technology-driven solutions for HR management. The notion that these solutions have the capacity to enhance productivity and efficiency within work environments is well recognised.

It is imperative to comprehend certain limitations that are present in this study. The generalizability of the findings in this study may be constrained due to the utilisation of a single case study. Furthermore, the study lacked comprehensive analysis about the potential financial implications and challenges commonly associated with the implementation of Human Resource Information Systems (HRIS).

In summary, the use of Human Resource Information Systems (HRIS) represents a notable progression in the field of HR management. The impact of it on the effectiveness of an organisation cannot be denied. The utilisation of Human Resource Information Systems (HRIS) has the potential to significantly enhance organisational performance and efficiency. This can be achieved by strategic planning, meticulous evaluation of the specific needs of each firm, and the allocation of adequate resources.

In conclusion, it is recommended that organisations prioritise the completion of a comprehensive needs analysis prior to the implementation of Human Resource Information Systems (HRIS). This will ensure that the selected system aligns with the specific requirements of the organisation. In order to optimise the benefits derived from the utilisation of Human Resource Information Systems (HRIS), it is imperative for organisations to ensure the provision of continuous training and support to their Human Resources (HR) personnel. It is imperative that future investigations conduct a comprehensive analysis of the potential obstacles and costs linked to the adoption of Human Resource Information Systems (HRIS), so providing a more profound comprehension of the resulting implications.

# REFERENCES

Al-Shibly, H. 2011. Human resources information systems success assessment: An integrative model. *Australian Journal of Basic and Applied Sciences* 5(4), 157-169.

Ammarhusien 2015. The Employee Perception of the Human Resources Information Systems Success. *International Journal Of Business and Management Invention* 4(2), 10-15.

Argote, L. & Ingram, P. 2000. Knowledge Transfer: A Basis for Competitive Advantage in Firms. *Science Direct* 82(1), 150-169.

Bach, S. 2000. From Performance Appraisal to Performance Management. In S. Bach & K. Sisson (eds.) *Personnel Management: A Comprehensive Guide to Theory and Practice.* Oxford: Blackwell Business, 254-258.

Bailey, J. & Pearson, S. 1983. Development of a Tool for Measuring and Analyzing Computer User Satisfaction. *Management Science* 29(5), 530-545.

Barile, S. Pez, G., Sebasti, M. & Ugarte, N., 2010. On The Quest of Choosing an Effect HR Information System – Assessing its Role and Key Success Factors. *Horizontes Empresariales* 9(1), 49-54.

Beadles, N., Lowery, C. & Johns, K. 2005. The Impact of Human Resource Information Systems: An Exploratory Study in the Public Sector. *Journal of Communications of the IIMA* 5(4), 39-46.

Boateng, A. 2007. *The Role of Human Resource Information Systems (HRIS) in Strategic Human Resource Management (SHRM)*. Hanken: Swedish School of Economics and Business Administration. Master's Degree Programme in Accounting. Master of Science Thesis.

Brown, S. 2008. *compareHRIS.com.*
Available at: https://www.comparehris.com/human-resource-information-systems-/. Accessed 21 May 2023.

Brown, S., Massey, A., Montoya-Weiss, M. & Burkman, J. 2002. Do I really have to? User acceptance of mandated technology. *European Journal of Information Systems* 11, 283-295.

Bryman, A. 2016. *Social Research Methods.* 5th ed. Oxford: Oxford University Press.

Bussler, L. & Davis, E. 2002. Information Systems: The quiet revolution in human resource management. *The Journal of Computer Information Systems* 42(2), 17-20.

Carneiro, F. 2011. HRIS and global compliance framework. *IHRIM Workforce Solutions Review* October/November 1-7.

Carrell, M., Elbert, N., Hatfield, R., Grobler, P., Marx, K., Schyf, S. 1999. *Human Resource Management in South Africa.* South Africa: Prentice-Hall Inc.

Charmaz, K. 2014. *Constructed Ground Theory.* 2nd ed. London: SAGE Publications Ltd.

Chauhan, A., Sharma, S. & Tyagi, T. 2011. Role of HRIS in improving modern HR operations. *Review of Management* 1(2), 58-70.

Clarke, P. & Cooper, M. 2000. *Knowledge Management and Collaboration.* Basel.

Creswell, J. 2013. *Research Design: Qualitative, Quantitative and Mixed Methods Approaches.* 4th ed. California: Sage Publications.

Creswell, J. & Creswell, J. 2017. *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches.* California: Sage Publications.

Crosley, J. 2021. *GRADCOACH.*
Available at: https://gradcoach.com/what-is-thematic-analysis/
Accessed 25 October 2023.

Davis, F. 1986. A Technology Acceptance Model for Empirically Testing New End-User Information Systems: Theory and Results. *Doctoral dissertation, Sloan School of Management.*

Davis, F. 1989. Perceived usefulness, perceived ease of use and user acceptance of information technology. *MIS Quarterly* 13(3), 319-320.

Davis, F., Bagozzi, R. & Warshaw, P. 1989. User acceptance of computer technology: a comparison of two theoretical models. *Management Science* 35(8), 982-1003.

Dessler, G. 2005. *Human Resource Management.* 10 ed. New Jersey: Pearson Prentice Hall.

Dery, K.; Wiblen, S. & Grant, D. 2009. Human Resources Information (HRIS): Replacing or Enhancing HRM. *Research Gate.*

Ekinci, H. & Yilmaz, A. 2002. A RESEARCH ON INCREASING MANAGERIAL EFFECTIVENESS IN PUBLIC ORGANIZATIONS. *Erciyes University Faculty of Economics and Administrative Sciences Journal* (19), 35-50. Available at: https://dergipark.org.tr/en/pub/erciyesiibd/issue/38173/440981

Flick, U. 2018. *An Introduction to Qualitative Research.* London: Sage Publications Ltd.

Fontana, A. & Frey, J. 2005. The Interview: From Structured Questions to Negotiated Text. In N. Denzin & Y. Lincoln (eds.) *The SAGE Handbook of Qualitative Research.* London: Sage Publications, 695-727.

Fugate, B., Stank, T. & Mentzer, J. 2009. Linking Improved Knowledge Management to Operational and Organizational Performance. *Journal of Operations Management* 7(3), 247-264.

Gibson, J., Ivancevich, J. & Donnelly, J. 1991. *Organizations: behavior, structure, processes.* 7 ed. Homewood: Irwin Inc.

Gold, A., Malhotra, A. & Segars, A. 2001. Knowledge Management: An Organizational Capabilities Perspective. *Journal of Management Information Systems* 18(1), 185-214.

Hendrikson, A. 2003. Human resource information systems: Backbone technology of contemporary human resources. *Journal of Labour Research* 24(3), 382-387.

Hussain, Z., Wallage, J. & Cornelius, N. 2007. The use and impact of human resource information systems on human resource management professionals. *Information & Management* 44(1), 74-89.

Issac-Henry, K., Painter, C. & Barnes, C. 1993. *Management in The Public Sector(Challenge and Change).* London: Chapman and Hall.

Ivancevich, M. 1990. *Organizational Bahavior and Management.* Second ed. BPI/IRWIN.

Johnson, R. & Gueutal, H. 2011. *Transforming HR Through Technology. The Use of E-HR and HRIS in Organizatios.* Alexandria: SHRM Foundation.

Kavanagh, M., Thite, M. & Johnson, R. 2009. *Human resource information systems : basics, applications, and future directions.* Los Angles: Sage Publications.

Khera, S. & Gulati, K. 2012. Human Resource Information System and its impact on Human Resource Planning. *IOSR Journal of Business and Management* 3(6), 6-13.

Kovach, K. & Cathcart, C. 1999. Human Resource Information Systems: Providing Business with Rapid Data Access Exchange and Strategic Advantage. *Public Personnel Management* 28(2), 275-281.

Kovach, K., Hughes, A., Fagan, P. & Maggitti, P. 2016. Administrative and Strategic Advantages of HRIS. *SAM Advanced Management Journal* 66(3), 34-43.

Krueger, R. & Casey, M. 2014. *Focus Groups: A Practical Guide for Applied Research.* 5th ed. California: Sage Publications.

Kumar, N. & Parumasur, S. 2013. The Impact of HRIS on Organizational Efficiency: Random or Integrated and Holistic?. *Corporate Ownership & Control* 11(1), 567-575.

Lawler, E. & Morhman, S. 2003. HR As A Strategic Partner: What Does It Take to Make It Happen?. *CEO Publication G 03-2(430)* 14-21.

Lepak, D. & Snell, S. 1999. The Human Resource Architecture: Toward a Theory of Human Capital Allocation and Development. *The Academy of Management Review* 24(1), 31-48.

March, J. & Simon, H. 1958. *Organizations.* New York: Wiley.

McEvily, S. & Chakravarthy, B. 2002. The Persistence of Knowledgebased Advantage: An Empirical Test for Product Performance and Technological Knowledge. *Strategic Management Journal* 23(4), 285-305.

Miller, M. 2004. *Establishing value for HR Technology.* New York: Conference Board

Morgan, S. & Saymon, G. 2004. Electronic interviews in organizational research. *ResearchGate*. Available at https://www.researchgate.net/publication/38176922_Electronic_interviews_in_organizational _research

Morris, M. & Venkatesh, V. 2010. Job characteristics and job satisfaction: understanding the role of enterprise resource planning system implementation. *MIS Quarterly* 34(1), 143-161.

Nawaz, M. 2012. To assess the impact of HRIS in facilitating information flow among the select software companies in Bangalore, India. *Research Journal of Management Sciences* 1(3), 1-8.

Ngai, E. & Wat, F. 2006. Human resource information systems: a review and empirical analysis. *Personnel Review* 35(3), 297-314.

Nowduri, S. 2011. Management İnformation Systems and Business Decision Making: Review, Analysis, and Recommendations. *Journal of Management & Marketing Research 7,* 1-8.

Opdenakker, R. 2006. Advantages and disadvantages of four interview techniques in qualitative research. *Forum: Qualitative Social Research* 7(4), 3-14.

Plunkett, P. 2001. *Managing Knowledge & Work: An Overview of Knowledge Management.* USA: Knowledge Management Working Group of the Federal Chief Information Officers Council. U.S. General Services Administration.

Rangriz, H., Mehrabi, J. & Azadegan, A. 2011. The Impact of Human Resource Information System on Strategic Decisions in Iran. *Computer and Information Science* 4(2), 81-87.

Sadiq, U., Khan, A., Ikhlaq, K. & Mujtaba, B. 2012. The Impact of Information Systems on the Performance of Human Resources Department. *Journal of Business Studies Quarterly* 3(4), 77-91.

Sekaran, U. & Bougie, R. 2016. *Research Methods for Business: A Skill Building Approach.* 7 ed. Newyork: John Wiley & Sons.

Shani, A. & Tesone, V. 2010. Have human resource information systems evolved into internal e-commerce?. *Emerald Group Publishing Limited*  2(1), 30-48.

Smith, J. 2015. *Qualitative Psychology: A Practical Guide to Research Methods.* London: Sage Publications.

Stone, D., Stone-Romero, E. & Lukaszewski, K. 2006. Factors Affecting the Acceptance and Effectiveness of Electronic Human Resource Systems. *Human Resource Management Review* 16(2), 229-244.

Venkatesh, V., Davis, F. & Morris, M. 2007. Dead or alive? The development, trajectory and future of technology adoption research. *Journal of the Association for Information Systems* 8(4), 268-286.

Venkatesh, V., Morris, M., Davis, G. & Davis, F. 2003. User acceptance of information technology: toward a unified view. *MIS Quarterly* 27(3), 425-478.

Wei, S. & Feng, A. 2013. *Research on applications of Human Resource Information System in SMEs.* Amsterdam: Atlantis Press.

Wiblen, S., Grant, D. & Dery, K. 2010. Transitioning to a New HRIS: The Reshaping of Human Resources and İnformation Technology Trust. *Journal of Electronic Commerce Research* 11(4), 251-267.

Williams, M., Dwivedi, Y., Lal, B. & Schwarz, A. 2009. Contemporary trends and issues in IT adoption and diffusion research. *Journal of Information Technology* 24(1), 1-10.

Wright, P. & Nishii, L. 2007. *Strategic HRM and Organizational Behavior: Integrating Multiple Levels of Analysis.* Centre for Advanced Human Resource Studies, School of Industrial and Labor Relations, Cornell University. Available at: https://hdl.handle.net/1813/77351. Accessed 25 May 2023.

Yeung, A., Lai, K. & Yee, R. 2007. Organizational Learning, Innovativeness, and Organizational Performance: A Qualitative Investigation. *International Journal of Production Research* 45(11), 2459–2477.

Interview Questionnaire:

**THE IMPACT OF HRIS ON ORGANIZATIONAL EFFICIENCY**

Introduction of the Interviewee:

Name:

Designation:

Organization:

**HR Functions:**

1. Does the HRIS has improved the accuracy and efficiency of your recruitment process?

   Answer:

2. Does the HRIS has enhanced the effectiveness of your employee onboarding procedures?

   Answer:

3. Does the HRIS has streamlined the performance appraisal process?

   Answer:

4. The HRIS has facilitated better management of employee records and documentation. What do you think about it?

   Answer:

**Time Management:**

5.  Do you think the HRIS has reduced the time required for HR-related administrative tasks?

    Answer:

6.  Does the HRIS has accelerated the communication of important HR updates to employees?

    Answer:

7.  The HRIS has contributed to faster resolution of employee queries and concerns. What did you think?

    Answer:

8.  Do you agree that HRIS has minimized the time spent on manual data entry and paperwork?

    Answer:

**Cost Management:**

9.  Do you think HRIS has resulted in cost savings through reduced paper usage and printing?

    Answer:

10. Does HRIS have lowered expenses associated with manual record keeping and storage?

    Answer:

11. Does HRIS have optimized resource allocation in HR-related activities?

    Answer:

12. Do you think HRIS has helped in controlling recruitment-related costs?

    Answer:

**Managerial Satisfaction:**

13. Are you satisfied with the overall performance of the HRIS in improving HR functions?

   Answer:

14. Does HRIS meet your expectations in terms of time management?

   Answer:

15. Were you satisfied with the cost management effort of HRIS?

   Answer:

16. Did you believe the HRIS has positively impacted managerial decision-making?

   Answer:

Thank you for the interview. Your feedback is valuable to me in assessing the impact of the HRIS on organizational efficiency.