

## **Impact of Cloud-Based HR Systems on Business Performance Metrics**

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### **Abstract**

Human resource (HR) systems and cloud computing technologies have both become integral to modern businesses, and their fusion can have significant impacts on business metrics.

The goal of this paper is to systematically study the impact of implementing cloud infrastructure on the Human Resource systems of an organization, leveraging which, an organization attains sustainable growth and thus helps the country in achieving its economic goals.

The study examines the impact of cloud-based HR systems on key business metrics such as employee productivity, turnover, and profitability. The paper also provides insights into the different phases of implementation, challenges, and benefits of implementing cloud-based HR systems apart from the conceptual framework of the study and offers recommendations for organizations considering adopting such systems.

And further research can be done on risk issues associated with adopting cloud computing like data privacy (due to data breaches), Compliance issues.

**Keywords:** Cloud-based HRM, Cloud Computing, business performance metrics, Business digitalization.

### **INTRODUCTION:**

Changes and Challenges in the Business scenario are inevitable. These changes have either a positive or negative impact on the growth of the business

If the business is digitized, it can go paperless, enables remote working capabilities, and use mobile technology to access the data and the overall pattern of business can be transformed to be in tune with the latest technology thereby increasing the span, efficiency, quality, and accuracy of doing business.

In today's corporate world, Human Resources Management (HRM) has to play a very critical role in business. It is used in employment, redeployment, training and even motivation. The human resource department of any organization enjoys a central role in not only formulating policies but also streamlining the operational process. To make a human resource department more effective and efficient, new technologies are now being introduced on a regular basis.

Several studies have shown that cloud-based HR systems can improve efficiency, reduce costs, and enhance data security for businesses. Recruiting, onboarding, performance management, and payroll are some of the HR processes that can be streamlined by cloud-based HR systems. Automating these processes and storing data in the cloud can save HR departments time and resources while reducing error risk and improving data accuracy.

Additionally, cloud-based HR systems can help businesses save costs by reducing the need for on-premises hardware and software. Cloud-based systems are often offered on a subscription basis, which is more cost-effective than investing in traditional on-premises solutions. This is especially beneficial for small and medium businesses that may not have the resources to invest in expensive on-premises HR systems.

By incorporating multi-factor authentication and data encryption, cloud-based HR systems can also enhance data security. In the event of a disaster or system failure, businesses can also protect HR data by storing it in the cloud. There can be a significant impact of cloud-based HR systems on business metrics. Enhancing data security can reduce the risk of costly data breaches and compliance violations, resulting in increased productivity and profitability.

Cloud-based HR systems can also provide valuable insights into HR performance, including metrics such as employee engagement, retention, and turnover rates.

The National Institute of Standards and Technology (NIST) defined Cloud Computing (CC) as “a model for providing provisioned and on-demand computing resources which include networks, servers, storage, applications, and services” (Alharthi et al. 2015[4])

Cloud computing can be divided into mostly three types.

1. Private clouds
2. Public clouds
3. Hybrid clouds

And again, Cloud computing services can be classified into Infrastructure-as-a-Service (IaaS), Platforms-as-a-Service (PaaS), and Software-as-a-Service (SaaS).

For decades, HR systems have been an important part of organizational management. The induction of cloud-based HR systems has changed the way organizations manage their HR processes. Organizations enjoy a bunch of benefits by employing Cloud-based HR systems, which include reduced IT infrastructure costs (no need to have on-premise), improved employee engagement, and increased flexibility, more security, no need for HR software updating (As per Service level agreement done by the cloud provider).

### **AIM OF THE STUDY:**

➤ **Primary Objective:**

To explore the impact of cloud-based HR systems on business metrics.

**Secondary Objectives:**

- To understand the impact of implementing a cloud-based HR system on various metrics such as Employee Productivity, turnover and profitability.
- To identify the challenges of implementing the cloud-based HR system in an organization.  
To provide valuable recommendations to enhance the business performance.

**I. Impact on Employee Productivity:**

The basic idea of implementing any cloud service is to give more productive time for organization employees, as they can concentrate on their core business. Cloud-based HR systems in any organization can significantly impact employee productivity. With cloud-based systems, employees can access HR information and services from anywhere, anytime securely. This reduces the time employees spend on administrative tasks including infrastructure and allows them to focus on their core job responsibilities. Cloud-based HR systems also provide real-time information and analytics, allowing employees to make informed decisions about their work.

**II. Impact on Employee Turnover:**

Cloud-based HR systems can also have a positive impact on employee turnover. By providing employees with access to HR services and information, organizations can increase employee engagement and satisfaction. Cloud-based HR systems also provide a platform for continuous learning and development, which can improve employee retention.

**III. Impact on Organizational Profitability:**

Cloud-based HR systems can have a significant impact on organizational profitability. By reducing administrative costs and streamlining HR processes, organizations can save time and money. Cloud-based HR systems also provide real-time data and analytics, allowing organizations to make informed decisions about their workforce. This can lead to improved productivity, reduced turnover, and increased profitability.

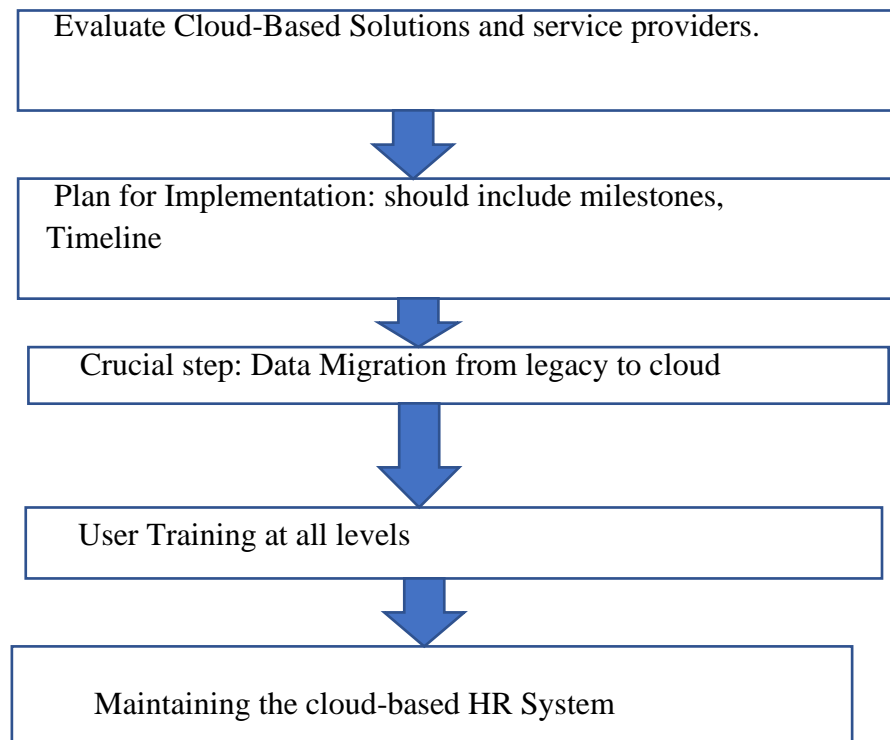
**Challenges and Benefits of Cloud-based HR Systems:**

Implementing cloud-based HR systems can be a challenging process. Organizations must ensure that they have the necessary IT infrastructure, data security, and training to support the new system. However, the benefits of cloud-based HR systems are significant. They offer increased flexibility, reduced costs, and improved employee engagement.

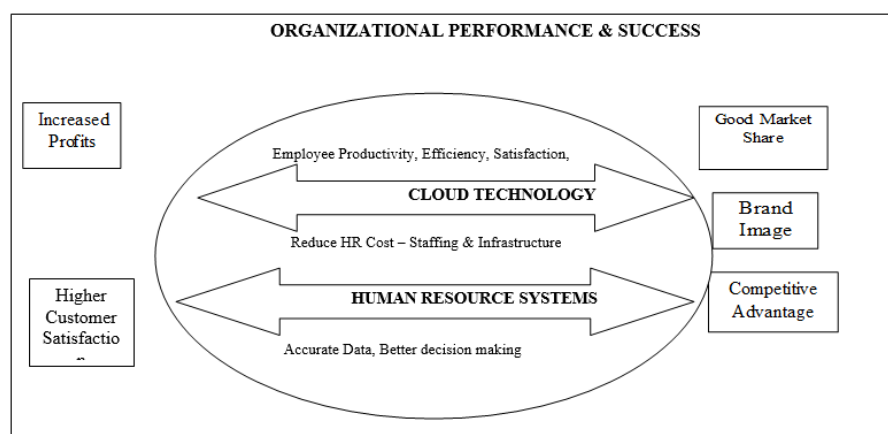
**Recommendations for Organizations:**

Organizations considering adopting cloud-based HR systems should conduct a thorough assessment of their current HR processes and infrastructure. They should also evaluate the potential benefits and challenges of implementing a cloud-based system. Finally, organizations should consider working with a reputable HR technology vendor who can provide guidance and support throughout the implementation process.

### Implementation flow diagram:



### CONCEPTUAL FRAMEWORK:



The above diagram represents the conceptual framework of the study. It is depicted that Cloud computing is data driven , to manage and organize large data which is used as a catalyst along with the Human Resource system to measure the HR metrics or the indicators saved in cloud and to retrieve useful information to make effective decision which in turn enhance the overall performance of any organization. Hence, the dependent variables such as Profitability, customer satisfaction, Productivity, Brand image, HR Cost factor are controlled by the cloud

to provide quick and quality information to enhance the performance of the organization at large.

### **REVIEW OF LITERATURE:**

According to (Algrari, (Mar.-Apr. 2017),)[1] in his article, emphasized that the recent buzzword cloud computing has become an innovative technology to increase productivity and the value of the business. In a competitive and challenging environment, it is important to use the information system with help of big data to provide simple measurable indicators to understand the performance of the business. The author also focused on the positive impact of cloud computing on performance improvements such as inventory reduction, cost reduction and competitive advantage. However, there are various other values studied earlier by various other scholars on the negative impact on performance due to IT investment at the organizational level and its relationship with considerable return were also discussed. Finally, the various types of benefits and enhancement of organizational performance due to the effect of using cloud computing were also discussed.

(Lydgate, 2018)[14] in his dissertation emphasized that Entities all over the world continue to concentrate and focused on human resource (HR) analytics for taking crucial decisions and executing the HR plan. The study was based on the details collected from the 71 articles which provided the definition and background on the part of developing and implementing company strategy. The thesis incorporates and compares a total of 9 case studies to further contextualize its applicability and effect on US-based businesses. This paper's main goal is to show how HR analytics has advanced in both academic research and practical corporate applications. The author of this study has made an in-depth analysis on causes and effect relationship among the strategic implementation of HR analytics to support HR professionals in enhancing the organizational performance.

(Malaya Malla, 2020)[15] in their article highlighted that business worldwide now adopts Information Technology to sustain in the global Market. The recent trend in business is to record the large database using cloud-based computing technology, which secures the data and also measures the performance of Human Resource Management (HRM). This technology act as a management function which works on an internet-based system. The researchers collected data from IT companies in Odisha. Around 40 respondents gave their views on the effect of cloud-based computing on HRM performance. The study used correlation to find out the significant relationship between the effect of Cloud-based computing on HRM and its performance management.

According to (Woods, 2018),[19] the researchers focused on the new technology which provided software solutions across the world using the gateway of Cloud computing technology (CCT) in 2017. This was a revolutionary new shift to this platform by the small business to get infrastructural solutions to its problems. The study's main objective is to recommend a conceptual framework for implementing CCT in small businesses. This study also observed the financial and operational benefits of using this technology in small business and also studies the challenges in implementing this technology. The study also reviews the trends, key attributes, and deployment of CCT in various types of small businesses.

According to (Isaac Odunayoa, 2017)[11] in their study highlighted the importance of cloud computing technology which provide accessible storage of large volume of data to enhance Human Resource Management (HRM). This study uses a cloud platform for the deployment of a Human Resource Information System (HRIS) using OnibereOdunayoSecurity-4 (OOS-4) security. This model is an integrated and inclusive approach for understanding the interrelatedness of various components of HRM for securing the data. The Platform as a Service using Google App Engine is used, which is secured for encryption and storage of data which in turn enhances HRM.

In the study conducted by (Hassan, 2021),[10] the existence of leadership support served as a mediating variable to examine the effects of the adoption of a cloud-based human resource management on innovative behavior in SMEs in Jordan. Companies in the information and communications sector with less than 100 full-time employees were included in this study. In Jordan's small and medium-sized businesses, descriptive measurements revealed a high level of innovative activity and leadership support. The study discovered that the intention to use cloud computing for human resource management had a substantial impact on leadership support. Also, the intention to use cloud computing for human resource management had an impact on innovative behavior, showing that the independent variable had a considerable impact on the dependent without a mediating effect. The findings demonstrated that the association between intent to embrace cloud-based human resource management and innovation behavior was somewhat mediated by leadership support.

#### **RESEARCH GAP:**

The researchers observed from the various studies that the Cloud based HR system is a booming manifesto which is used to its optimal to improve the business performance. The research gap identified is that impact of cloud based system on key HR metrics which might affect the overall performance of the business at large was not studied. Hence, the study was intended to conduct to understand the concept and theoretical view about the topic.

#### **METHODOLOGY:**

The researchers used descriptive type of research design and deductive type of reasoning. The data used for the study is purely secondary in nature from journals, websites and reviews from various studies.

#### **SCOPE FOR FURTHER RESEARCH:**

In general, Cloud-based systems faces certain risk like data privacy (due to data breach), Compliance issues (as cloud vendor may not be able to fully customize according to your needs) which may cost Business to pay hefty fines. As business must comply with various local and international laws and regulations.

These risks can be considered for further research.

## CONCLUSION:

Human resource (HR) systems and cloud computing technologies have become integral to modern businesses, and their integration can have significant impacts on business metrics.

Cloud-based HR systems can significantly impact key business metrics such as employee productivity, turnover, and profitability. While there are risks, and challenges associated with implementing a cloud-based system, which includes an important phase of Data migration.

Research has shown that cloud-based HR systems can provide numerous benefits for businesses, such as improved efficiency(due to less investment in IT infrastructure), cost savings, and enhanced data security. Cloud In terms of business metrics, the impact of cloud-based HR systems can be significant. Improved efficiency and cost savings can lead to increased productivity and profitability, while enhanced data security can reduce the risk of costly data breaches or compliance violations but may not remove. Cloud-based HR systems can also provide valuable insights into HR performance, including metrics such as employee engagement, retention, and turnover rates.

Overall, the integration of HR systems and cloud computing technologies can provide significant benefits for businesses in terms of efficiency, cost savings, and data security. These benefits can ultimately lead to improved business metrics, making cloud-based HR systems on clouds are valuable investments for businesses of all sizes.

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