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ROLE OF CLOUD COMPUTING IN HR PRACTICES

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ABSTRACT

In order to compete successfully in the current economic climate, global industry has embraced information technology. The ability to act quickly and accurately is critical to the expansion of a firm. The same is made possible by the IT infrastructure. The most difficult obstacle presented by the most current business trend is ensuring the database's safety. Cloud computing is the most recent advancement in internet-based technology that enables management duties to be carried out promptly and securely. When it comes to measuring an organization's overall performance, Human Resource Management places a primary emphasis on the record-keeping and database maintenance of its human resources. The purpose of this study is to investigate how CBC contributes to HRM's level of effective performance. The research relied on input from forty different IT professionals residing in Odisha. Computing in the cloud has a close relationship to the HRM concepts that are used to evaluate employee performance. In order to properly analyze the data, we have taken into account the correlation. It has been discovered that HRM has a substantial correlation with performance management; however, the results of a successful CBC have a considerably greater impact on the performance of HRM.

keywords*: Cloud Computing, Human Resource*

INTRODUCTION

The traditional method of management focuses on the creation of an official organizational structure as well as the successful completion of the goal. The emergence of new trends and developments contributed to the increased complexity of management. At the same time, it was quite challenging to comprehend all of the many commercial concerns. The most influential thinkers in the field of management, such as F.W. Taylor (Scientific Management), Henry Fayol (Administrative Management), Max Weber (Bureaucratic Management), and Peter F. Drucker (Management by Objectives), are responsible for the development of new approaches to the solution of many difficult problems posed by the complex structures of organizational works. A further aspect of the present tendency is that the organization structure and job load have become more time and performance bound respectively. The function of information technology plays a significant part in the answer to the various tasks that need multitasking. Cloud computing has been proven to have a good affect on IT infrastructure, which assists in the capacity building of organizations. This was discovered by the Human Resource and IT departments, which became two sides of the same coin to assure the performance of a company. It provides information and awareness to the top management, which allows the organization to function more effectively. In addition to this, it assists in making decisions that lead to the effective utilization of resources, an improvement in production, and a cost-benefit analysis. Additionally, it gives the company access to cutting-edge technology without requiring major additional financial investments.

THEORETICAL BACKGROUND

The development of management is a reflection of the execution of human group intelligence, mental capacities, learning skills, and physical connection in the context of a group action to carry out the most important social activities. From the period when things were manufactured by hand through the time when machines did it, several thinkers have altered the conceptions of management. The establishment of the company makes use of a variety of methodologies, including social theory and scientific research. However, the intricate nature of corporate processes required the implementation of automation. Automation of systems allows for a connection to be made between the administrative process and the scientific technique of production in order to do the work more rapidly. In spite of all the advances in technology, however, the global corporate world continues to operate in a bureaucratic manner. The study of human behavior is extremely important to the process of constructing successful businesses. Both the internal and external management of human resources are now being carried out using a tried and tested method. All of the difficulties that businesses face in effectively managing their resources may be alleviated by utilizing information technology. When it comes to ensuring the success of the firm as a whole, top management has the most significant job, which is known as human resource management (HRM). The use of information technology makes HR practice more effective, which in turn influences management to execute results that are technologically aware. The adoption of CBC is progressively successful (Willcocks, Venters, and Whitely, 2013) for HRM solutions, such as the online production of brief profile processing in social media, according to current developments in this field. Nevertheless, a significant number of HR departments do not follow this practice. The most recent advancement in information technology for the purpose of interviewing, screening, and rating potential employees is cloud-based computing for human resource management.

Computing Done Via the Cloud (CBC)

According to the National Institute of Standards and Technology (NIST), "cloud computing is a model for enabling ever-present, suitable, on-demand network access to a collective pool of configurable computing resources (e.g., networks, servers, storage, applications and services) that can be speedily provisioned and released with minimal management effort or service provider interaction." [C]loud computing is a model for enabling ever-present, suitable, on-demand network access to a collective pool of configurable computing IaaS, also known as "Infrastructure as a Service," SaaS, sometimes known as "Software as Service," and PaaS, also known as "Platform as a Service," are the three primary services that are included in. Despite the fact that it has non-canonical issues, it makes it simple to manage things like wages, attendance, performance management, and personnel files. It offers the necessary infrastructure for doing algorithmic analysis on large amounts of data and works to ensure the happiness of the client. The abbreviation CBC stands for the word "Cloud Client," which refers to a piece of software on a computer that is executed by user-friendly functional applications such as – (a) Infrastructure as a Service, often known as IaaS: The run and control software is deployed by the CBC provider, who is responsible for managing the infrastructure consisting of the storage, network, and computer resources. To improve the amount of processing power and storage space available, several services such as Digital Ocean, Li node, Rack space, Amazon Web Services (AWS), Cisco Meta pod, Microsoft Azure, and Google Compute Engine (GCE), among others, are utilized. (b) Software as a Service, often known as SaaS, is a system that is based on the internet and connects users to a variety of programs, such as email and the features included in Microsoft Office. Cloud-based applications are utilized in order to provide the task in a speedy and simultaneous manner. It is a comprehensive software solution that operates on a pay-as-you-go basis and is provided by a specific customer in the capacity of a cloud service provider on the basis of an agreement. The benefits of using a software as a service platform include the following: (i) easy

recruitment of workforce; (ii) access to app data from anywhere; (iii) usage of free client software; (iv) obtain access to complex applications; and (v) use of free client software. The public cloud service provided by a service provider is utilized to host the customer's application with the least configuration required for the information technology (IT) infrastructure. This infrastructure includes the network, servers, operating system (OS), and middleware (Java, .NET, PHP, Python, etc.). The consumer is responsible for providing these components. (c) Platform as a Service, often known as PaaS: PaaS is short for platform as a service. It offers an open-source platform, which allows users to execute programs in an open-source environment. Examples of open-source environments include Google App Engine, programming languages, databases, operating systems, and so on. The application software that is used by industry leaders is accessed through the use of PaaS, which is a service that is housed in the cloud. Cloud devices including laptops, tablets, and smart mobile phones often use cloud client networks and rely on the CBC for a variety of job functions.

HRM and electronic HRM

According to Kumar Renuka (2017), modern HRM is facilitated by information technology and is referred to as e-HRM. It makes use of HRMS (Human Resource Management System Software). It is used to update the history record of the personnel, beginning with the interview and continuing all the way through to the ultimate end. In order to make the e-HRM easier to use and more efficient, the technology known as cloud computing has been integrated into the same system. Through the utilization of cloud computing, the HRIS (Human Resource Information System) platform has been modernized into HCM (Human Capital Management) and its processes have been streamlined. It is responsible for a variety of tasks inside an organization, including training and development, management of missing employees, administration of salaries and benefits, and management of the flow of work. According to Dai Liang tie, He Yang, and Xing Guangdong (2015), the Human Resource Management services confront several obstacles in terms of working efficiently, conserving money, and quickly responding to various situations, among other challenges. Now that HRM and cloud computing are being used in service mode together, new opportunities for HRM have become available. IaaS, also known as "Infrastructure as a Service," SaaS, sometimes known as "Software as Service," and PaaS, also known as "Platform as a Service," are the three primary services that are included in. Despite the fact that it has several non-canonical issues, it makes managing the salary, attendance, performance, and personnel file more simpler. It offers the necessary infrastructure for doing algorithmic analysis on large amounts of data and works to ensure the happiness of the client. Cloud computing is one of the numerous technologies that has been integrated with others in order to make e-HRM simpler and more efficient. The use of cloud-based computing (CBC) has resulted in the streamlining and modernization of the HRIS (Human Resource Information System) system, which is now known as HCM (Human Capital Management). It is responsible for many of the organization's functions, including training and development, management of missing employees, administration of salaries and benefits, and management of the flow of work.

OBJECTIVES

1. to investigate how the effectiveness of HRM is affected by the use of cloud computing when it is successful.

2. A Human Resource Management System that Makes Use of Cloud Computing for the Study.

RESEARCH METHODOLOGY

In order to investigate the connection between CBC, HRM, and the Performance of HRM, the quantitative research approach is put into practice. In order to discuss the findings of the investigation, the correlation and regression methods will be utilized. As a sample, we have chosen to look at 40 different IT specialists working for 20 different Bhubaneswar-based organizations. A study questionnaire, represented here by Table 1, is created and sent out to a sample size of forty IT experts. In order to acquire the necessary data, both face-to-face interviews conducted in person and interviews conducted over the phone are employed. Table 2 contains the results of the data collection and tabulation. In this research, the rating scale serves as both the scale of measurement and the instrument for making judgments. 1 to 9 criteria are used when determining whether or not a question statement on the study questionnaire is legitimate. Following the tabulation of the data that was gathered, the mean of the replies is computed and presented in Table1.

Table 1 Concerning the Questionnaire's Research Question

PERFORMANCE	
Competency Mapping	Manages the core competency of
MBO	employees Work to objectives by employees
Access Centre	CBC makes easy to monitor the man,
0 360 appraisals	material and machine Feedback accuracy
Human Resource Accounting	Quick action in trend analysis of competency and compensation
General Question Performance	cCaBlcCu latihoans role in performance management and decision making

Table 2 The Accumulation of Data and Its Tabulation

CBC-CLIENT	TOTAL	Average	Round up
SaaS	325	8.12	8
PaaS	338	8.45	8
IaaS	263	6.67	7
HRIS	297	7.42	7

e-HRM	327	8.17	8
General question CBC	288	7.2	7
HRM			
Training	332	8.3	8
Performance	305	7.62	8
Compensation	293	7.32	7
Incentives	326	8.15	8
Payroll Management	353	8.82	9
General question HRM	262	6.55	7
PERFORMANCE			
Competency Mapping	302	7.55	8
MBO	343	8.57	9
Access Centre	283	7.07	7
360 appraisals	271	6.77	7
Human Resource Accounting	348	8.7	9
General question PERFORMANCE	307	7.67	8

DATA ANALYSIS

The association suggests that CBC, HRM, and PERFORMANCE all have a reciprocal relationship with one another. Every group has at least one instance of each of the six functional connections. It is possible that they are connected to some other organization as well. In practical applications of statistics, the regression is often represented as an approximation of a functional relationship. The importance of a link can be assessed using either correlation or regression, although both methods produce the same results. Now, correlation is determined through the use of data analysis in Microsoft Excel, and regression is determined through the application of SPSS 13.0.

Table 3 Average Responses (Frequency)

CBC- CLIENT	HRM	PERFORMANCE
8	8	8
8	8	9
7	7	7
7	8	7
8	9	9
7	7	8

CORRELATION:

Table 2.2 is a graph that displays the correlations between three different components. The correlation between CBC- CLIENT and HRM is 0.72, which indicates that it is a positive correlation and that it is significant. It indicates that CBC-CLIENT and HRM have a healthy working relationship with one another. The implementation of CBC that is successful has a major relation to HRM.

There is a 59 percent positive association between HRM and performance.

It demonstrates that the association is positive but is not as important as the connection between CBC CLIENT and HRM. On the other hand, the link that exists between the CBC-CLIENT and PERFORMANCE is remarkable and more significant. In compared to the values of the other variables in this test, the correlation value is 0.81, which places it significantly closer to the value 1. The entirety of the correlated findings are presented in Tables 4, 5, 6, and 7.

Table 4 Correlation (CBC, HRM, PERFORMANCE)

	CBC-CLIENT	HRM	PERFORMANCE
CBC-CLIENT	1		
HRM	0.727607	1	
PERFORMANCE	0.816497	0.594089	1

	CBC-CLIENT	HRM

CBC-CLIENT	1	

Table 5 Correlation (CBC, HRM)

HRM	0.727607	1

Table 6 Correlation (HRM, PERFORMANCE)

	HRM	PERFORMANCE
HRM	1	
PERFORMANCE	0.594089	1

Table 7 Correlation (CBC, PERFORMANCE)

	CBC-CLIENT	PERFORMANCE
CBC-CLIENT	1	
PERFORMANCE	0.816497	1

Rank And Percentage (Frequency)

Now, the frequencies of all the variables that are connected have been shown in the order of rank and percentage. It has been discovered that the SaaS, PaaS, and e-HRM services provided by CBC-CLIENT have a greater impact on the findings of this study. They come in first place for SaaS (1. 60%), second place for PaaS (1. 60%), and third place for e-HRM (1. 60%). CBC has a significant impact on the Payroll system that is utilized by HRM. mainly due to the fact that it gives the same rank and percentage as e-HRM (1,100%). The CBC-CLIENT is hypothesized to have a substantial link with PERFORMANCE. Due to the fact that the final result of the rank and percentage shows as MBO (1, 80%), (1, 80%).

Table.8 Rank and Percentage

Point	CBC-CLIENT	Rank	Percent	Point	HRM	Rank	Percent	Point	PERFORMANCE	Rank	Percent
1	8	1	60.00%	5	9	1	100.00%	2	9	1	80.00%
2	8	1	60.00%	1	8	2	40.00%	5	9	1	80.00%
5	8	1	60.00%	2	8	2	40.00%	1	8	3	40.00%

3	7	4	0.00%	4	8	2	40.00%	6	8	3	40.00%
4	7	4	0.00%	3	7	5	0.00%	3	7	5	0.00%
6	7	4	0.00%	6	7	5	0.00%	4	7	5	0.00%

CONCLUSION

The professionals working in IT companies and heavy industries have been given the recommendation to use the CBC- CLIENT that is offered by the leading Cloud providers. It will assist increase the performance of their industry's human capital, which is one of their primary assets. When operating in this mode, the overall performance will improve while maintaining a high level of safety. The decision-makers in the Odisha Government need to demonstrate their genuine attention to adopting the CBE-CLIENT in order to communicate with the public in an efficient and straightforward manner. The contribution made by this study is one hundred percent genuine, and it will be helpful to managers at all levels. There will be a correct relationship that is also a more rapid one between all of the scalar chain in the management. The successful application of CBC in the IT industry is directly contributing to the noticeable improvement in performance. It also has an effect on the entirety of the other customer industries.

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