

A Resource-Based View Assessment of Big Data Analysis and Its Impact on Strategic Human Resources Quality Management Systems

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Abstract

Big data analysis is a process to analyze all the structured and unstructured and semi structured data collected from different types of sources. Therefore, collecting proper data and information from different sources is very important for any business organization and analysis of those data is also important. Thus, collecting information from different sources helps to gain knowledge about the demands and needs of the customers and market. Whereas analyzing all the data helps to understand the market trends which are helpful to enhance business performance. Apart from that, human resource management is another important system of any business organization. Therefore, human resource management is a strategy process or system which helps to enhance the productivity of the business organizations. Along with that there is a big impact of big data analysis on the human resources management system and the impacts are analyzed in this particular research study. On the other hand, the purpose of this research study is to analyze the concept of resource based big data analysis. Apart from that, the impact of big data analysis on the strategic human resource management systems of the business organizations is another purpose of this particular research study. Thereafter the researcher has adopted several types of techniques and methods for collecting more information and analyzing all the data. Furthermore, research has used the secondary methods and the sources for collecting some accurate and genuine data about big data analysis and human resource management systems. Apart from that the research has used the qualitative techniques for analyzing all the collected data in a systematic review. Therefore, the uses of secondary sources help the researcher to gain knowledge about the process of big data analysis and the process of human resource management. Thus, impact of big data analysis on the human resource management system is analyzed in this particular research study.

Keywords: strategic, human resource management, system, resource based, assessment

INTRODUCTION

World organizational structure is evolving day-by day where with the increase of the innovations, the numbers of the risks and challenges are also increasing. Highly focused organizations understand the significance to acquire, and accelerate the necessary data. The HR departments are targeted to increase the potential success of the business managing the human resources. Hence, the role of the new techniques like big data analytics than the conventional one is providing the best evidence to achieve the business success. Many organizations targets to achieve their success within a short span of time. Here, the study describes the key concept of the big data analytics, and the significant roles of the analytics in the HRM. Major purpose of this study is to develop the understanding in order to get organizational growth. With the increasing use of technology, the use of big data analytics has become influential about which the study is going to provide knowledge.

CONCEPT AND KEY BENEFITS OF BIG DATA ANALYSIS

Big data analysis is the strategic procedures used to explore the meaningful insights like the hidden patterns, market trends, unknown correlation, and the customer preferences. It provides multiple advantages such as it helps in the strategic decision-making, prohibiting the fraudulent activities in the strategic management among the other initiatives of the management procedure. In this modern contemporary world, big data analytics is feeding everything which is done in the online platform along with the offline activities. Big data analytics has emerged significantly in almost every industry (Garcia-Arroyo and Osca, 2019). The importance can be understood by an example of its use. *Spotify* is one of the well-known music streaming platforms currently. The company possesses about 96 million users who generate a significant amount of data every day (Nisaret *et al.* 2020). Depending on the provided information the cloud system automatically accelerates the suggested songs depending on the customer preferences- by the smart recommendation search engine depends on the share, comment, or like history, and the other notions. This is a great example of the importance of big data analytics (Dahlbom *et al.* 2019).

Key Benefits: Simply, big data means the massive amount of data which cannot be generated, identified, processed, and stored using the conventional tools of data analysis. Here are the key benefits of big data analytics.

Table 1: Key benefits of big data-analytics
(Source: Self-developed)

Benefits	Use Case
Risk Management	Big data analysis helps in mitigating the risks in the strategic management. Each organization suffers the risks, and challenges, causes, and the problems can be reduced easily using the big data analytics (Singh and El-Kassar, 2019).
Innovation, and product development	Big data analytics generates innovations, and helps to develop the product.
Strategic decision making	Most important benefit of big data analytics is the strategic decision making. Depending on the different notion
Improve consumer experience	The role of big data analysis can be found in acquiring the consumer experiences.

STRATEGIC HUMAN RESOURCE MANAGEMENT SYSTEM

Strategic HRM management is the combination of multiple strategies that helps in employment management finding the competitive advantage of the business. Moreover, the descriptive and complex strategic HRM management involves different techniques (Sousa *et al.* 2019). These are **Personnel techniques**, promoting, and rewarding, hiring procedures of the employees. Another requirement is the **structural techniques** such as the organizational design. **Cultural technique** is

another important thing which helps in regulating, and maintaining the high performances within the organizational nature. Strategic human resource management is important in managing the quality of the human resources (Dahlbomet *al.* 2019). It helps in explaining the HR strategies, the working functions of the HRM procedures within the organization.

ROLE OF BIG DATA ANALYSIS IN STRATEGIC HRM

The role of big data analytics uses the statistical model in the strategic HRM management which indicates that assumptions of the business procedures induce validation in it. Importance of the big data analytics in strategic HRM management includes-

Increasing cost efficiencies and reducing the inappropriate candidate: With the help of the big data analytics in the HR, the management can observe the potential gap in the organizations. It helps to reduce the unnecessary time, and cost in the HR management. And also helps to mitigate the chances of bad recruitment (Ciampiet *al.* 2021). As the selection of the “right person for the right choice “is vital for organizational growth, the importance of big data analytics is great here.

Increasing retention rate: In the overall hiring procedure within the organization, it requires significant energy, time, and money for the entire procedures. The next stage is employee education, and the training that also needs all these things. Instant resignation of those trained employees denotes the loss of the organizational investment. In order to avoid the repetitive gap, the HRM can find the potential risks easily by taking the help of data analytics, job performance, employment history, profile updates, and the online activities. It helps in increasing the employee retention eliminating the potential risk from the HR procedures (Abdulmelike, 2017).

Predicting performances: HR managers can pick the right candidate, and find the norms if the candidate is right to hire to accomplish a specific job role with the help of big data analytics. It works with the comparison of different prospects focusing on the hunting tools of big data analytics.

Managing the ethical and legal issues: Maintaining confidentiality of the business is one of the greatest concerns of each business organization. Multiple risks can occur in the HRM increasing the chances to lose the secrecy of the business. Other than that there can be multiple types of legal issues. Using the big data analytics, the risks, and challenges can be found easily by the management professionals (Ciampiet *al.* 2021). Hence, the legal and ethical issues of the business procedures can be eliminated with the help of the analytics tools like big data analytics. On the other side it can also be described as the risk management tools of the business (Abdulmelike, 2017).

PROPOSED METHOD

This article has been developed based on the *secondary dataset* including the journals, literature reviews, documents published by the peer journals. It has suggested the best understanding about the concept of big data analytics, and its role in the HRM procedures of the organizations. Information from these multiple secondary sources has been put to the right analysis about the importance of the Strategic HRM. *Qualitative* approach here in this article has drawn the correlation between big data analytics, and the strategic HRM significantly. The analysis in this study provides best knowledge, and opportunities maximizing the utilities of the data with the careful consideration (Ciampiet *al.* 2021). However, the qualitative analysis of the secondary data has explicitly described the key benefits of the big data analytics in the HR management. In this article the secondary approach has made an emphasis to explore the diverse factors of the strategies. Developing the knowledge, and analyzing them in systematic methods it focuses to provide the best understanding about the big data analysis within the organizational structure.

FINDINGS AND DISCUSSION

IMPACTS OF BIG DATA ANALYSIS ON STRATEGIC HRM SYSTEMS

Big data analysis is a strategic process that helps to develop business performance. Apart from that, human resource management is another important process for any business organization. Therefore, there is a big impact of big data analysis on the strategic HRM system and that is analyzed in this part of this particular research study. First of all, big data analysis helps the companies to develop their hiring process which is important for any company (Garcia, 2019). Therefore, hiring proper employees for the organization helps the companies to enhance the productivity of the company and that leads to the

development of the economic condition of the company. Apart from that, the usage of big data analysis helps the companies to understand the market trends and that leads to the growth opportunities.

Human resource management is an important process and the HR of the business companies have to complete a lot of responsibilities. Therefore, big data analysis helps the HR team of the business organizations to complete all the responsibilities properly. Thereafter, big data analysis helps the companies to predict times for beneficial growth for the organizations and because of that the growth opportunities increase for the companies (Pera, 2019). Apart from that, hiring employees is the most important part of human resource management and big data analysis helps to increase the levels of employee engagement of the business organizations. As big data analysis is a strategic process therefore, it helps the HR team to be informed about all the information about the markets and other important factors.

Furthermore, gaining more knowledge and information helps the companies to improve their decision making skills which are also very important for any business organization. In addition to that, employee experience is very important for any company to enhance the productivity of the companies (Dahlbomet *al.* 2019). Therefore, the usage of big data analysis helps to decrease attrition and that helps to increase good employee experience for the companies. Apart from that, big data analysis helps to identify the skill gaps between the employees and that helps the employees to enhance the levels of their skills. Thus, it can be said that the process of big data analysis plays an important and significant role in the strategic HRM system.

EFFECT OF BIG DATA ANALYSIS ON BUSINESS PERFORMANCE

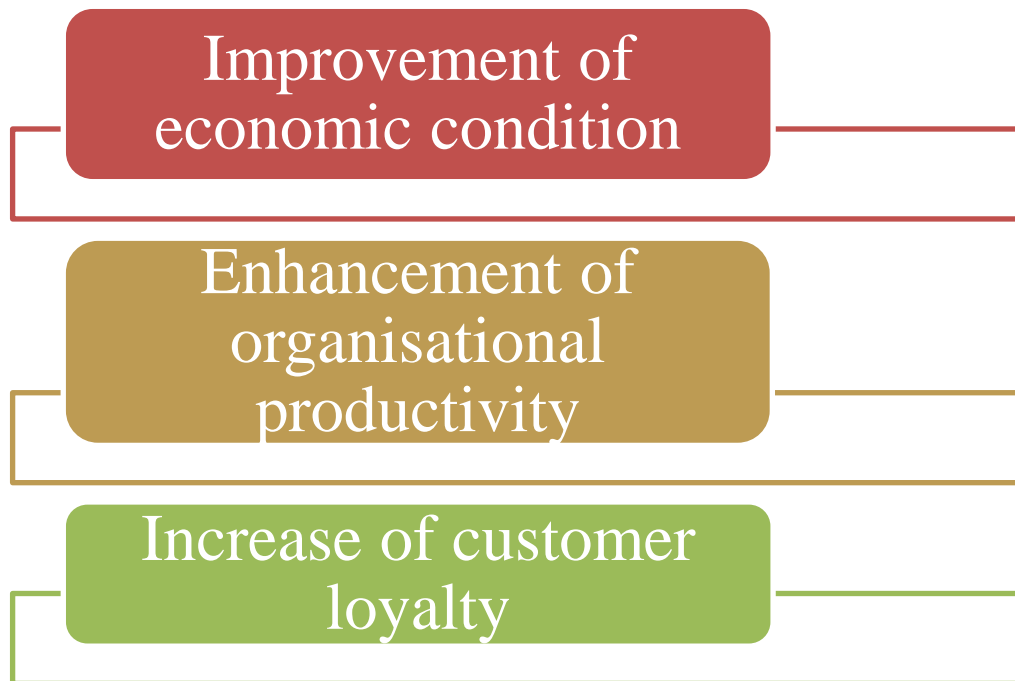


Figure 1: Improvement through big data analysis on organisational performance
(Source: Self-developed)

The strategic process of big data analysis helps to enhance the business performance of the companies. Firstly, the usage of big data analysis helps to decrease the costs of the companies which help the companies to enhance their economic condition. Hence, the performance of business is based on several factors such as economic condition, productivity, profitability and others. Therefore, enhancing the economic condition leads to the enhancement of business performance (Müller, 2018). Apart from that, the usage of big data analysis helps to increase the efficiency of the companies. Thereafter, increasing efficiency leads to the enhancement of productivity of the companies. Thus, the enhancement of productivity of the companies leads to the increment of business performance. Along with that, the usage of big data analysis helps to reduce the expenses of the companies therefore it helps the companies to set the pricing strategy for the products.

Therefore, because of a small percentage of expenses the companies can use reasonable pricing strategies and that helps to gain more customers for the companies. Thus, enhancing the number of customers for the companies leads to the development of the performance of the business. Apart from that, using the process of big data analysis helps to improve the

productivity and performance of the business companies and because of that the companies became able to compete with big companies (Mangla *et al.* 2020). In addition to that, the usage of big data analysis in business organizations helps to enhance the sales of the companies and helps to increase the customer loyalty for the companies. Therefore, increment of sales rate helps the companies to enhance the economic condition of the companies. Along with that, increasing customer loyalty also helps the companies to enhance the economic condition of the companies. Thus, it can be said that the big data analysis process plays an important role in enhancing business performance.

CONCLUSION

Observing the key components of big data analytics, and its role in managing the HRM within the organizations, the perpetual procedures of the data analytics can be assumed. The availability of huge data and analytic software has supplied unique moments throughout the history of data analytics. Convergence of the trends can find true revolutionary time within the organization delivering the promises in the organizational success. Especially, in this modern contemporary business world the importance of big data analytics is very high with the potential benefits, and challenges. With the thorough investigation in this study, it carries the hope to provide best understanding about the big, data analytics. This article is hopeful that it will help the readers, and the peer researchers in acquiring important knowledge about the subject matter. Concluding the article it can be said that the information in this study is powerful enough to analyze the importance of modern analytic tools like big data analytics in the HRM.

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