



Human Resource Management Digital-Based In the Global Era

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Abstract

The advancement of digital technology is an inevitability that has an impact on human resource management patterns. This research is to find out the benefits of digital technology to Human Resource Managers in decision-making for the growth and development of organizations or companies. Through qualitative methods researchers dig up data from various related sources and disseminate questionnaires using Google Forms with links shared through email messaging facilities and WhatsApp in a chain, to obtain comprehensive information about the benefits of digital technology on Human Resource Management strategies. Furthermore, data is processed, written, and interpreted so that researchers can conclude about the impact of digital technology on Human Resource Managers in decision making to win the competition in the global era.

Keywords: : Digital technology; Human resource management; Global Era

Background

The rapid advancement of science and technology has a significant effect on changes approached in all aspects of human life. Unconsciously we have become citizens of the world, without being limited by space and time, we can interact anytime anywhere, and with anyone [1]. As stated Globalization is the acceleration of the relationship of the world's citizens who associate events in one location with each other and cause change [2]. Kita is entering a very interesting era, namely the Era of Big Brother, the era of big retirement, the era of worshippers, the era of openness where every interconnected activity can be monitored and even predictable. , in addition to being profitable can also be detrimental, depending on how to deal with it. Just has warned, "the higher the technology, but also is not used with reason and great attitude (high tech low touch) impact many parties are dragged and trapped in the artificial world" [3]. The positive impact with the help of big data is, information can be easily accessed, leaders, managers just analyse the available data to help in decision making. The ability to analyse data becomes a very

important asset to determine the progress of an organization or company. Diera digital, quality human resources are needed, because being the defining asset of the success of the company Stiglitz Big data is an inevitability, has caused dramatic and significant changes among organizations or companies [4]. Big data is a large amount of data from a variety of structured and unstructured sources, accessible to anyone with expertise, as a basis for strategic decision-making. According to, big data is divided into two types of data, namely follows [5]:

- Structural Data is data that is very easy to categorize and analyse. It can be obtained on sensor network devices on electronic devices, smartphones, and GPS. Includes things like sales figures, account balances, and transaction data.
- Unstructured data is more complex data, for example, such as in customer opinions of goods and services on a site, photos, multimedia devices, and social media, which cannot be easily separated according to their categories or analysed numerically.

The volume of big data is very large, so the data processing process requires large storage and more specific analysis. Human

Resource practitioners are aware of the rapid growth of big data. The industry 4.0 with the *Internet of Things*, plus systematic management and presentation methods will be very helpful in making strategic decisions for the progress of the organization or company. Superior Human Resources (HR) is the key to digital-based data processing. Management that uses data analysis changes conventional ways to the modern way. According to, is collecting, storing, processing, summarizing, reshaping, and providing data information on the internal business activities of companies and competitors' businesses so that they are easily accessible and analyzed for various management activities, this is often called business intelligence (*Business Intelligence, BI*) [6]. The term BI is intended as a general term as an umbrella in data analytics, reporting, data management, and presentation, on various applications, infrastructure, materials, equipment, and as the best way for organizations to get information, improve. For data extraction needs, and assisting in optimal organizational decision-making [7]. Digital transformation is an inevitability, superior human resources are no longer just assets, but have been transformed into the core of organizations or companies, HR expertise in digital technology is a short-term and long-term investment for anyone who wants to win the competition in the global era. Company leaders and Human Resource (HR) practitioners should not be too late to execute decisions, because everything goes so fast, decisions must be taken quickly, carefully, and precisely. The role of Millennials as both subjects and objects has moved the digital-based economy. Millennials have successfully pioneered and even led digital-based businesses. Internet users are dominated by millennials. The survey conducted by IDN Research Institute in collaboration with Alvara Research Centre in 12 major cities in Indonesia was entitled Indonesia Millennial Report 2019. As a result, Indonesian millennials have been connected to the internet as much as 94.4%, even most of them have a dependence on the internet. Based on data from the book *Thematic Gender Statistics: Profiles of Millennials*, published by the Ministry of Women's Empowerment and Child Protection with the Central Statistics Agency, shows that millennials born between 1981-2000 88 million people, or 33.75% of the total population of Indonesia. Strengthened by official data from the Kominfo 2021 E-commerce web is growing rapidly, the number of internet users in Indonesia reaches 63 million people. In line with data from The World Economic Forum in 2015 Indonesia is predicted to 2020 will rank 8th in the world economy, so standard chartered bank predicts the same? While Goldman Sachs's predictions are more dramatic, Indonesia will become the world's number seven economic power after China, the United States, India, Brazil, Mexico, and Russia. One of the supporters of economic power is the activity of e-commerce, the mastery of digital technology by millennials is believed to be the economic power of the future,

Problem formulation

Based on this description, the formulation of this research is;

- How does Digital Technology affect an organization or company?
- How does the influence of mastery of Digital Technology by millennials affect the business world?

Research objectives

- To find out the influence of Big Data on organizations or companies
- To find out the influence of mastery of Digital Technology by millennials on the business world

Theoretical Studies

Human resource management

Digital superior human resources become very strategic among existing resources (people, goods, money, and information), humans are the most important resources to spur the growth and development of organizations or companies. The goal of human resource development is to optimize the quality of knowledge, skills, attitude, and behaviour for the benefit of the organization or company [8,9]. This statement emphasizes the quality of knowledge. Meanwhile, according to, human resource management is a policy and exercise to meet the needs of organizations and employees or aspects contained in human resources such as employee procurement, registration, recruitment, screening, training, compensation, and performance assessment [10]. This opinion emphasizes on management, for harmony between the interests of employees and organizations or companies, empowerment is needed as stated, and human resource management is an effort to empower employees in the company [11]. Superior human resources will be able to analyse data so that organizations or companies will quickly make decisions in the era of global competition. In the opinion of, human resources (HR) is the development and utilization of employees to achieve the goals and objectives of individuals, organizations, communities, nations, and countries that are efficient and effective [12]. Human Resources is concerned with humans working to produce goods, services, or work efforts. You can be able to do all economically valuable activities. According to, human resources (HR) is a formal system in an organization to ensure the effective and efficient utilization of human talents and potential to achieve organizational goals [3]. In "The Human Resources Glossary," from The Balance Careers defines Human Resources as the people who occupy the staff and operate an organization or company [13]. Human resources are one of the most dominant factors in an organization or company compared to other factors. Human Resource Management is a strategy for

implementing management functions, namely planning, organizing, leading, and controlling, in every activity or operational function of human resources since the process of registration, selection, training and development, placement, coaching which includes promotion, demoralization, and transfer, performance assessment, compensation, welfare, security, industrial relations, to the termination of work relations, which is intended for improving quality of performance of human resources towards the achievement of organizational goals more efficiently and effectively. This is in line with Mary Parker Follett's opinion, human resources (HR) is an art to achieve organizational goals through arranging others to carry out various jobs needed or in other words not to carry out the works themselves [14]. This opinion is reinforced by who states that human resource management deals with all aspects of how people work and are managed in organizations, including human resource planning, performance management, learning, and human resource development. This is human resource management is the planning, organization, direction, and supervision of procurement, development, compensation, integration, maintenance, and release of human resources to achieve various individual, organizational, and community goals [15]. Therefore, human resources are needed to be managed properly so that the effectiveness and efficiency of the organization are increasing and optimal. In the future, human resources must understand digital, superior human resources will not only become assets but will be the core and the most important element compared to other elements.

Digital technology

In the digital era of euphoria, the democratization of information becomes an inevitability, this becomes the focus of several studies on digital-based management. The leaders of organizations or companies in decision-making are greatly helped by the existence of digital technology. According to, through Big Data, information can be easily obtained depending on how to utilize it. This opinion is clear that Big Data is data that is too large to exceed the capacity process of existing database systems and also too fast so it does not fit into dumbill's existing database architecture structure [16]. Big Data was first introduced, but actually, the use and need for data have been around for a long time [17,18]. According to the characteristics of big data consist of three parts, namely:

- Volume, big data has a large capacity so that in processing and managing requires large storage media and specific and detailed analysis.
- Velocity, big data must have a process and a fast and real-time.

- Variety, big data must have diversity, be structured or unstructured, and must always be sourced from data sources.
- While the characteristics of veracity (truth) and value (value) are related to the uncertain and useful as a presenter of information from the resulting data. Big Data is high-volume, high-speed, cost-effective information as an innovative form of information processing that allows for increased insight and is used in Hilbert and Lopez's decision-making [19]. Employee training (as part of business analysis) that makes it possible to recognize the patterns of workers to produce changes to Huselid organization. Many method options include the Agile Method, which is a method in the development of software engineering, to anticipate the reduction of change costs due to software gradually. When facing changes in developer requirements by implementing agile methods, it will quickly adopt these new requirements into the program carried out by Pressman [20,21]. Digital technologies that replace previous technologies (mechanical and analog electronics). Being a megatrend, this is the concern of the study of communication and digital. Domination of information centre mastery; especially conventional mass media (mainstream) is reflected by the emergence of e-government into the flow of information so quickly and cannot be limited by space and time, anyone can access information, as stated by Lon Safko, that in the era of Digital anyone can be a producer and comment on Safko information [22]. Optimization of Big Data hrm managers will be greatly helped to get actual data and information, obtained through artificial intelligence or Artificial Intelligence (AI) such as, in monitoring the performance of employees and providing feedback or feedback between colleagues or requesting evaluations from their superiors. The answer is in the era of global competition, mastery of technology becomes the main key, superior human resources are not only assets but the most important core in addition to other elements in the organization or company. To be able to read, analyze and optimize the benefits of Big Data to help make decision-making easier. In the face of and winning the global competition.

Millennial generation

The definition of generation according to referred to as generation is a group of individuals based on the similarity of age, year of birth, and time experienced together in a life that has a significant influence on their growth phase [23]. The notion of generational difference was popularized by Neil Howe and William Strauss in 1991. Disbursed generations based on the period of birth and the similarity of historical events. The generation born in 1982 until the turn of the millennium or in 2000 [24]. Grouped as Millennials or Generation Y, this generation is marked familiar with instant communication technology such as Mobile Phones, WA, SMS, email, instant messaging, and friendship media such as Facebook, Twitter, Instagram, although the definition of the

birth year is still debated. The Australian Bureau of Statistics classifies generation Y births between 1983 and 2000, as prevalent in the UK and US, a reference between the 1980s and 1990s. This generation was labelled as the N-gene after the Net and the information revolution [25]. This grouping difference, simply because of historical location and event differences, geographical locations are debated in generation groupings, according because conceptualization of groupings is often based on historical events in the United States, there needs to be a generalization agreement of generation grouping that is acceptable in all places, in general [22]. Based on official data from the Kominfo 2021 web millennial generation as a trigger for business digitization, E-commerce is growing rapidly along with public adoption of internet technology. Almost the entire order of life is inseparable with the help of digital technology. Millennials are familiar with instant communication technologies such as email, SMS, instant messaging, and others, because millennials grew up in the internet boom [26]. They are very responsive to changes in technology or gadgets, "experiencing various revolutions in technology, starting with computers, information, and then the internet." they have their characteristics, ways of thinking, behaving, and making decisions more logically, practically, and professionally, they can access knowledge from many sources including from the internet not only from the bench. A survey conducted by IDN Research Institute in collaboration with Alvara Research Center in 12 major cities in Indonesia entitled Indonesia Millennial Report 2019 showed that Indonesian millennials have been connected to the internet as much as 94.4%, even most of them have experienced internet dependence.

Previous Research

Research conducted [27]. From Essex Business School, the University of Essex under the title Big D and Human Resources Management: the results of big data can offer several opportunities to HR practitioners. In a survey conducted, only 15% of respondents claimed candidate analysis played a key role in their organization. Similar results were provided although other reports highlight that in some industries the use of Candidate Analysis is very common due to the availability of data [28,29]. With the title Information systems and the potential benefits of big data for education, the result is on the analysis of available big data and the technology needed to manage it to produce information useful to humans. This information is necessary to make important decisions or policies that will in turn affect human life later. In doing so the data has become information. That information will be transformed into knowledge that can be applied in everyday human life. Referring to the results of the study, clearly show the importance of Big Data, so in this study,

to reveal whether organizations, companies should migrate to big data, and how millennials contribute to the migration.

Methodology

This research uses Creswell's qualitative method, often referred to as methodology based on events that occur in the field, the processes and meanings studied are highlighted to provide a research overview of technology-based Human Resource strategies with the foundation of existing theories [30]. The foundation of this theory is also useful in providing a discussion of research results so that researchers can compile themselves by providing discussions about the management of Human Resource strategies based on digital technology. Researchers dig from various sources on the use of digital technology for organizations or companies Researchers do not conduct interviews specifically, only through observation and study of documents, and disseminate questionnaires to explore millennials' interest in digital technology. Based on the data obtained by researchers complete a process, analyze inferring, and pour it into a piece of writing.

Results and Discussions

Results

The rapid and rapid development of digital technology affects organizations or companies. Consequently, corporate organizations began to use Big Data Analytics and Artificial Intelligence techniques as a means to determine business strategies and improve the productivity and efficiency of Human Resources. Changes in data management from conventional to modern through big data can improve efficiency and help identify business opportunities such as unspoiled consumer segments. Thus, the potential for growth and profitability becomes an inevitability. Data analytics helps companies see changes in customer needs patterns and provides a clear picture of what to do, production, consumer services, or shortages among employees and others. Transformation of understanding of HUMAN RESOURCES (Human Resources) which was previously classified as a factor of production and then the company's assets based on the results of this research has received respectable recognition that is as an integral and core part of an organization or company, then superior human resources is an investment that will be profitable for anyone. Abundant resources, open opportunities, if you do not have superior human resources then everything becomes meaningless because those who can analyse data and use it to win the global competition are only superior human resources, so it is not excessive in the era of rapid advancement of digital technology HR is the core of the organization or company, then the most exciting long-term investment is an investment in the field of knowledge. The results

of the survey were conducted by Researchers using Google Forms and links shared through email messaging facilities and whats Aap in a chain. This survey was conducted to see how millennials view, regarding millennials' understanding of digital technology. The survey asked two things: "First year of birth to make sure respondents are millennials. Second Understanding of digital technology, the results of the survey are as follows [31-33];

The year of god

Survey questions about when the year of birth, with 2 answer options, namely birth before 1980 and after 1980, with parameters before and after 1980 to facilitate the classification of respondents' answers. Although some answered the year of birth specifically, after being grouped into 2 groups, namely births before and after 1980, this is to map that the respondents represented the millennial generation and the old generation. Of the 148 respondents who entered obtained results as figured.

The answers from respondents who obtained birth data after 1980 amounted to 98.9% and the remaining births before 1980 amounted to 1.1%, meaning that the target of this study is that millennial generals were fulfilled because the respondents were 98.9% millennials.

Furthermore, it is related to an understanding of digital technology [34,35].

Understanding of digital technology

Millennials' understanding of digital technology, based on surveys with a choice of answers: understand, lack of understanding, do not understand. Can be obtained answers as figured.

The answers from respondents obtained the following data; understand= 92.%. Lack of understanding 7% do not understand = 1% of the data is significant with the millennial generation, meaning that millennials, in general, understand digital technology. Broadly speaking, it can be known that millennials understand and are familiar with technology, this will affect their mind set in thinking, acting, and acting, which is based on data analysis in decision making. Digital transformation is an inevitability, HR expertise in digital technology is a short-term and long-term investment for anyone who wants to win in global competition. Company leaders and Human Resource (HR) practitioners should not be too late to execute decisions, because everything goes so fast, decisions must be taken quickly, carefully, and precisely.

Statistical data

Based on data from the book Thematic Gender Statistics: Profile of Millennials, Ministry of Women Empowerment and Child Protection with the Central Statistics Agency, the number of

millennials born between 1981-2000 amounted to 88 million people or 33.75% of the total population of Indonesia. Compared to the number of other generations, currently, the percentage of millennials in Indonesia is the largest number (33.25%), followed by the number of generation Z (29.23%), generation X (25.34%), and the least is the generation of baby boomers and veterans (11.27%), the number of millennials dominates the demographics, this is a challenge and opportunity for the Indonesian nation, they will determine the future of Indonesia. For this reason, all parties, communities, governments, private sectors, and business leaders must anticipate adapting, competing, and winning the competition and sustainability in the global era.

Extermination

- Based on the formulation of the problem, namely; how does digital technology affect organizations or companies?

Digital-based Human Resource Management is an inevitability of the development of science and technology. In the era of digital technology, almost all activities can be helped by technology including in the field of human resource management. Human Resource managers can utilize technology in every activity. One of them is by utilizing Big Data, and the existing technology system will greatly help the leaders of organizations or companies in the management of human resources. Millennials are very understanding and familiar with the digital world, this will affect their mind set in behaviour and action, which is based on data analysis in decision making. Digital transformation is an inevitability, HR expertise in digital technology is a short-term and long-term investment for anyone who wants to win the competition and be sustainable in the global era. Company leaders and Human Resource (HR) practitioners should not be too late to execute decisions, because everything goes so fast, decisions must be taken quickly, carefully, and precisely with the help of digital technology.

Conclusions and Suggestions

Conclusion

- Organizations or companies must respond, annotate to the rapid development of digital technology, adapt, compete and win the competition, and be sustainable in the global era.
- The change in data management from conventional to modern means through Big Data greatly helps Human Resource leaders in making decisions and various needs for the progress of organizations or companies.
- Millennials who are familiar with digital technology act as subjects and objects for the digital technology-based economy.

- Superior Human Resources (HR) is no longer just an asset of the company but has become the core of the company that can determine the progress of the organization or company.
- Organizational leaders or companies must quickly adapt to that competition today in the digital age, so they must immediately migrate from a conventional way to a digital way.

Suggestion

- Organizational and Corporate Leaders must transform and adapt to the advancement of digital technology
- Organizations or companies must build big data to facilitate the management and utilization of data.
- Millennials must be given more roles to be able to implement and develop their potential, especially those related to digital technology.
- It must be a common awareness that Superior Human Resources is a short-term and long-term investment because it is no longer an asset but the core of the organization or company.
- All the cuttings immediately changed the mind that the current era is the digital era

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