



Challenges in Adopting Artificial Intelligence (AI) in HRM Practices: A study on Bangladesh Perspective

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ABSTRACT

Main Objectives: The objective of this study is to assess HRM practices in Bangladesh, as well as this paper, has highlighted the importance, future challenges, and benefits of adopting artificial intelligence. **Novelty:** In Bangladesh, most of the HR-related research conducted by focusing existing HR practices, this paper, therefore, sought to explain the next step of human resource management practices through the possibility of adopting artificial intelligence. **Research Methods:** The relevant information was collected from secondary sources, such as newspaper articles, books, and websites. Based on secondary sources, we explain HRM practices in Bangladesh, AI Significance, and challenges in the adaptation of AI. **Contributions:** This study will assist policymakers to pay attention to the benefits and importance of adopting AI in HRM practices in Bangladesh, besides further research can be conducted on employee perception and readiness of accepting AI. **Conclusion:** Human resource management practices focused on artificial intelligence have a great potential to enhance employee performance, talent development, learning and development, and employee retention, while also helping to minimize employee turnover. As Bangladesh is progressing and going to be a developing country by 2024, hence this is a high time to adapt AI to boost up HR function in the business organization.

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INTRODUCTION:

Artificial intelligence (AI) generally refers to a wide range of technologies that enable computers to perform tasks (including decision-making) that usually require human cognition (Adadi & Berrada, 2018). However, Artificial intelligence, also known as an interdisciplinary science, that imitates human capabilities and intellectual behaviour. The application of artificial intelligence theory and technology is also evolving. Many artificial intelligence tools, such as artificial neural networks, intelligent decision systems and fuzzy sets, have been used in many fields. Among them, the use of artificial intelligence in the field of human resource management is still being explored (Garg et al., 2018). Artificial Intelligence (AI) is a very new trend in the human resource (HR) field that has made its mark in the HR field as a recent age. Nonetheless, it has had a huge effect on the management of people, making it felt to be essential for the recruitment, training, growth and retention of workers at the workplace (Ivanov & Webster, 2017). Moreover, this recent move towards making HR activities based on Machine Learning and AI technologies has the potential to lead to significant improvements in terms of increasing employee engagement and efficiency at the workplace (Neumann & Bisschops, 2019). However, (Sousa & Rocha, 2019) mentioned, AI is a modern invention that helps individuals without special data processing capabilities to quickly view data. Artificial intelligence has revolutionized the way companies hire employees. In fact, the third-party head-hunting companies usually charge higher for the recruitment of any companies. Unfortunately, after 60 years of regular recruitment, the company usually charge a placement fee, and almost 15 years after the establishment of LinkedIn, until the advent of human resources artificial intelligence, the global recruitment industry has not changed much (Neumann & Bisschops, 2019).

In recent years, relying on LinkedIn and other traditional methods to attract and recruit the right employees has not been successful,

because most companies today want passive candidates who already have jobs and are reluctant to move. The shift to artificial intelligence can help companies find these passive talents. That's because, in addition to traditional social media sites, AI also uses robots to crawl and browse hundreds of sites, including personal sites, conference groups, and technical chat rooms. Not only do robots find a way to work that suits them, but they also estimate the possibility of anyone willing to change their career, making it easier for companies to dig out hard-to-find talent (J. Liebowitz, 2001). Artificial intelligence enables companies to perform tasks more efficiently. With the increasing burden of involving human resources managers in key decisions making, companies have recognized the value of using modern technology to leverage their human resource plans. Rapid changes in market conditions require a rapid response. In order to survive in the market, the western countries' HR associations are investing funds in research and development to provide some new advances. The theoretical foundation of artificial intelligence is helping companies to integrate unique structures. In addition, it also provides a stage that can enhance all human resource functions from recruitment, selection, training, growth, compensation and performance management easy and more efficient. Hence, For the company and to make the company green in HR functions, AI could be the most essential tool (Agrawal et al., 2019).

As most of the Bangladeshi organizations are using traditional methods of HRM practices, which is incurring the cost and reducing productivity. AI can save time, money and effort of HR personnel in recruitment and selection, KPI setting, performance evaluation, payroll and income tax management, talent management and employee turnover. As such, business organizations should adopt AI to ensure efficiency and sustainability of the HR department. For this study, authors like to investigate briefly, the present HRM practices in Bangladesh, Importance of AI in HRM practices and Challenges of adapting AI in HR practices in



Bangladesh. However, this concept paper will assist policymakers to conduct the extensive research on the necessity of AI adaptation in HR

and for the future researchers to find the empirical evidence to prove the AI benefits and employee perception towards AI adaptation.

LITERATURE REVIEW AND BACKGROUND ANALYSIS

HRM Practices in Bangladesh

The human resources management (HRM) is considered a fundamental organizational resource which helps an organization to maintain its successful operation. To sustain in the free market economy Bangladesh is also under fierce competition and required an effective and efficient HRM practice. Yet the scenario or HRM practices in Bangladesh is still underdeveloped. The Bangladesh government initially adopted a socialist economic model. Consequently, government and policymakers did not offer priority to concerns such as industrialization of the private sector, productivity and human resource Management (Mahmood & Absar, 2015). Though Bangladesh continues to modernize, the status of HRM practices remains predominant (N. Absar et al., 2012). Choudhury et al., (2020) Mentioned, despite the fact that HRM practices are important for improving organizational efficiency and competitive advantage, surprisingly inadequate numbers of studies on HRM practices have been carried out in Bangladesh. Besides, stated, the effectiveness and sustainability of HRM practices could be pivotal and driving forces for Bangladesh's economic growth to become a middle-income country by 2024, given the country's scarce natural resources and abundance of human resources(M. M. N. Absar et al., 2014). Many organizations are family-owned and controlled by family members, and human resource management activities tend to be seen as just a business owner's wish, and that is why the current HRM practices are far below the level needs to achieve in Bangladesh. There is still rare empirical research on HRM in Bangladesh, and only a few studies have been published in recognized and trusted journals, usually on specific issues of HRM practices (Choudhury et al., 2020; Kamrujjaman et al., 2016; Mahmood & Absar, 2015). At the present time, Labor and export-oriented companies have begun facing

pressure from the EU and North American countries to uphold their labour rights standards and improve working conditions in their factories (Bowden, 2014). This pressure from somewhere else is urging companies to change their organizational culture and HRM practices. As such big companies have started adapting E-HRM system and ERP access for HRM personnel.

Importance of Artificial Intelligence (AI) in HRM Practices

No department has more complex data management and analysis needs than the human resources department (Premnath & Chully, 2020). As such, Artificial intelligence can Reduce the work pressure of employees, simplify processes, analyse data, etc. AI engineering connects individual machines and computers to specific devices. The AI framework can be used for applicant selection, staff participation, re-engagement, career development, etc.(Jia et al., 2018). Therefore, Artificial intelligence-based software will enable the human resources department to maximize performance. Release human resources personnel to perform more specific roles and activities that are truly important to the organization. Artificial intelligence helps to minimize the logistical burden of HR practitioners and helps them make decisions based on data analysis rather than self-esteem. Artificial intelligence is also used to recruit, reduce preference and retain top talent. In addition, as technology becomes more reliable and reasonable, people are expected to use AI. There is a clear economic opportunity to develop emerging technologies as soon as possible without wasting time on expensive risk analysis.

However, artificial intelligence technology can improve the ability of any department to collect and process data and make preliminary predictions based on changing conditions (Ruby Merlin. P, 2018). Human resource leaders are increasingly expecting to add more content to key hierarchies. Nonetheless, the importance of



authoritative tasks can regularly keep HR experts away from this regular work. Computer-based intelligence can provide answers to this question. This shows the huge development area using artificial intelligence. If more organizations rely on AI to perform authoritative responsibilities, the productivity of the HR office may increase, and HR experts will have the option to focus more on the key expected levels (Premnath & Chully, 2020). Besides, self-sufficient knowledge is the most unparalleled type of innovation that relies on AI. It builds machines that can follow up

on their own and contact hidden data. In any case, we observe the control of calculations and certain forms with equal assumptions. Since the human resources department must make full use of data classification to make full use of information, artificial intelligence programming can automate complex tasks, such as collecting data centrally from several contacts, isolating worker and human resources issues into personal data and preparing teams. Implementing AI and its benefits in the human resource advantages include:

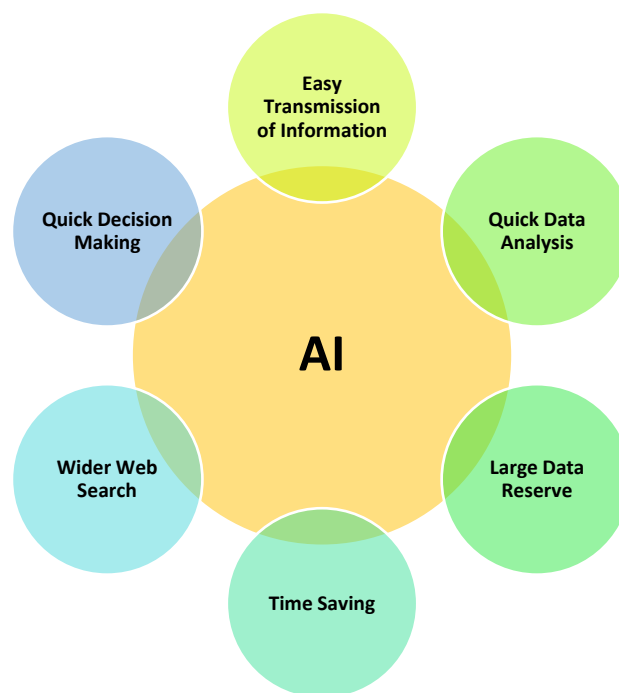


Figure 1: AI and its benefits

Since the human resources department hardly concentrates on the procedures of its best enrolment and individual executives, it can routinely change and update the simulated intelligent calculations. Human developers set calculations or formulas for situation boundaries, which can be specifically calculated based on occupation, workplace, working hours, competition, and the types of different variables related to the business. Here, computer-based intelligence is essentially arranged by reducing flawed principles and evaluating refined capabilities (Joo et al., 2018). In view of the

defects of human theory, a human dynamic process is an irrefutable error. Distinguish fine ability as the intensity of AI increases, many new arrangements are entering the business centre. One notable example of the increasing choice of answers in AI is computing, which evaluates emerging discourse examples and searches for signs of subtle abilities such as compassion (Ivanov & Webster, 2017). Through the AI program, the human resources department can help employees prepare for certification, perform extensive education, and learn new talents in the following ways. AI programs allow



individuals to work at their own speed, but an extremely incredible program can promote faster development by providing prizes and incentives based on each worker's profile. Individuals who lack intelligence or ideas may be implied by external assets or manpower coaches (Mercier-Laurent & Lukose, 2017).

Challenges of adapting Artificial Intelligence (AI) In Bangladesh

Artificial Intelligence (AI) has started and is expected to change the role of human resources. At the present technological advancement, AI is highly praised. While AI's journey was not easy at the beginning of 2000 when AI first began as an academic discipline. Though modern HRM functions in most of the countries are adopting advanced HRM practices like AI. Yet, HRM in Bangladesh still takes after traditional workforce

management practices, in recent years, analysts have distinguished changes that demonstrate progress in terms of strategic HRM practices(Choudhury et al., 2020). On the other hand, there are few people who believe that if AI is adopted then they may lose the job. Some people consider AI a major threat to humanity if development continues to disregard the risks associated with AI (Spadafora, 2016). While adopting AI in HRM practices in Bangladesh, organizations will face internal and external challenges. The biggest threat to adapt the AI is the fear of losing the job. It is clear that AI triggers a huge shift from physical to technical effort and thus gets such a bad name in taking over the work of the people(Mathur, 2019). In most cases, people believe AI can fully replace human involvement. From the adaptation point of view the major challenges are as following:

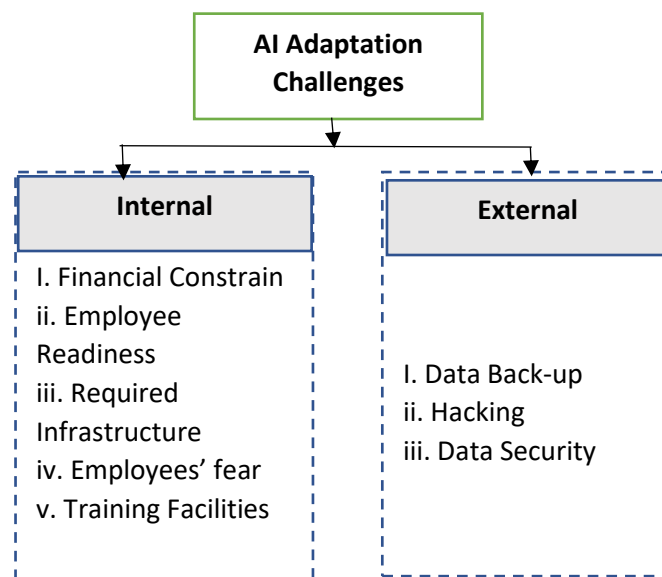


Figure 2: AI Adaptation Challenges in Bangladesh

Bangladeshi companies will face challenges to adapt AI in HRM practices from internal and external sources. For adapting AI in HRM practices the very first challenges, organization face is financial constrain. In Bangladesh still, owners consider HR department as cost incurring department. The next internal challenge is to convince employee the importance of AI and its benefits to adapt. Following internal challenge is to reduce the job loss fear from employees and

the last internal challenge is continuous training facilities. AI training is a continuous process; hence organization needs to maintain continuous training facilities. However, the adaptation of AI may also face external challenges like data back-up issues, if taking assistance from the third party of other countries, the organization will also face challenges to protect hacking and ensuring data security (figure 2).



METHODOLOGY

This conceptual study began with a fundamental question: what are the key challenges for AI in Bangladesh's current HRM practices? The authors analyzed previous works including published journals, generic articles and websites on IA and HRM. This research also verified by the ranking of research papers accessible from the Web of Science (WOS), Scopus and the double-blind peer-reviewed in the journal in question to validate the relevance of the articles. After that, the AI and HRM experts recognized journals to confirm that they were relevant for our research to be included. Next, the analysis used Five keywords: AI, adaptation, challenges, HRM and Bangladesh, then those articles are used for research this research. In this study, more than Hundred potentially applicable papers have been identified and used by using abstract screening method. This research has also carried out an unequalled search of scholarly papers and reviewed for relevant studies using the same keywords with EBSCOhost, Google Scholars, Science Direct, Emerald, Springer, JSTOR, University Library World Cat and ProQuest. The parameters for inclusion have been specified in this study. More than a Hundred papers pertaining to AI adaptation in HRM function have been listed in this study. Besides, the reviewer sought a high-quality review in order to investigate the studies selected and thus

analyzed their complete texts. This study began by analyzing whether the papers are quantitative or qualitative, exploratory or confirmatory in nature or not.

However, based on the past research and the recommendations mentioned in the previous articles, for an empirical paper author should investigate the assumption on the readiness and the perception of HRM personnel in Bangladesh to adopt the AI. To do that validation of the hypothesis, authors need to do the quantitative study by *adopting positive epistemology → deductive approach → Survey method → Cross-sectional study by using the statistical tools, SPSS and AMOS.*

RECOMMENDATION

As of today, Bangladesh is still using the traditional way of HRM practices, though few conglomerates', MNCs' and few corporate houses have started using E-HRM (HRIS, ERP etc.) yet the modern HRM practices did not flourish. To sustain and increase the efficiency organizations' in Bangladesh should adopt the ever-changing technology especially for the HR personnel. Artificial Intelligence (AI) adaptation is not easy for a developing country like us. To ensure the effective adaptation process, organizations need to formulate efficient and executable policies. To do that organizations may follow the following steps:

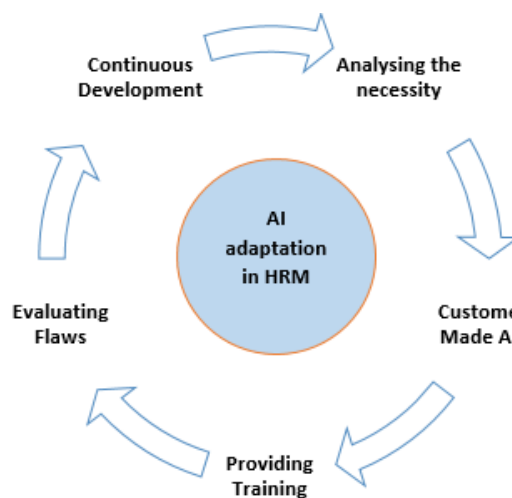


Figure 3: AI Adaptation steps



As stated in Figure 3 organization should follow several steps to ensure effective adaption strategy for AI in HRM practices. Step 1: Analysing the necessity (Financial ability and HR Personnel readiness to accept), Step 2: Developing tailor-made AI, Step 3: Conducting Training, Step 4: Evaluating loopholes', and maintaining the continuation of AI development

Besides, for the future study, researchers can conduct quantitative research to find the organizations and HR personnel perception to adopt AI in HRM practices. While conducting exploratory research, authors should focus on control variables' (age, sex and education) and UTAUT model.

CONCLUSION

Today's world is technology driven. None of the organization can sustain in the long run without transforming them manual to digital. So, des HRM practices. Artificial Intelligence assists to ensure efficient, effective and timely HR function. As Bangladesh is going to graduate as a developing country and focusing on the agrarian based economy to an industrialized and manufacturing economy, hence Bangladesh is at the edge of adapting modern HRM practices. To ensure sustainable and effective HRM practices, Bangladesh needs immediate adaptation of AI in HRM practices on a large scale. Though the AI adaptation will face utmost challenges initially, but the positive outcome is organizations' development friendly. This study will assist business owners, government and HR consultants to give focus on policymaking to face AI adaptation challenges and to safeguard effective HR practices.

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