Using Human Resource Management Analytics To Enhance The Kuwaiti Workforce: Review And Recommendations

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Abstract:

This study investigates the impact of Human Resource Management (HRM) analytics on improving the Kuwaiti workforce, offering significant insights and recommendations for policymakers and academics. The study utilises a qualitative methodology to collect data by conducting focus group discussion with 16 HR experts from different sectors in Kuwait. These discussions provide insight into the present status of HRM analytics in the country, emphasising the potential advantages and obstacles in its implementation. Participants indicated certain domains in which HRM analytics can significantly impact workforce development, including talent acquisition, employee retention, and performance management. The report highlights the significance of aligning HRM analytics with national objectives, emphasising the necessity of focused training programs and the incorporation of data-driven decision-making into the organisational culture. In addition, policymakers are provided with ideas on how to promote a conducive regulatory framework and facilitate collaboration between the public and private sectors. The research indicates that it would be beneficial for academicians to include curriculum that focus on analytics in order to adequately prepare future HR professionals for the changing requirements of the sector. In summary, the results of this study provide valuable insights into how HRM analytics may be used to support Kuwait's Vision 2035 and improve workforce efficiency and effectiveness.

Keyword: Human Resource Management, HR Analytics, Human Capital, Kuwaiti Workforce, Workforce Development

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I. Introduction

Manpower is the biggest asset of any organization. Human Resource Management is an essential persistent support of the growth and success of a business. With the expansion of technology and the reinforcement of competition, the business environment and dynamics have become swiftly puzzling. Human resource management analytics (HRM) is becoming a dramatically important method for organizations. The central idea is that by using analytics, HRM will make better data-driven decisions and concentrate on the strategic employs of human capital. That is, HRM can take benefit of the current revolutionary potential of numerous technological elements, develop a better comprehension of numerous concerns, and analyze numerous big information problems [1]. A credible working definition of HR analytics is to consider it "as the measurement and evaluation of key HR outcomes and workforce attributes to inform management and decision making". It refers to any approach to gather information about the employees in an organization and then use those insights to meet organizational goals [2]. Some organizations use people analytics in isolation that focuses on demographics, absence rates, general turnover, and below par performance, while some use it concurrently with other analytics analyses for better insights within the same research field [3]. A significant shift is noticed with organizational leaders seeking HR data and insights in order to make better workforce decisions.

The shift towards using data-driven human resource management (HRM) arose as firms in the Kuwaiti labor market faced challenges in forecasting the future workforce needs and understanding the external labor market dynamics. This is due to a number of factors, such as the substantial generational differences between workers, which could lead to cohesion and coordination issues, the increase in the number of women entering the labor force, which resulted in movements in occupational demographics and the demand for unique/specific skills, as well as the excessive reliance on expatriate employees. The mismatch between HRM utilization and personnel costs was the main reason for the reluctance of organizations in Kuwait to decrease the number of foreign employees despite the market recession [4]. This, and the fact that we are heading towards the Fourth Industrial Revolution where innovations such as AI and Machine learning will inevitably transition the way firms operate and interact with the workforce, are just some of the reasons HRMA has risen to the fore in

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Kuwait. Despite the advances in the practice, HR professionals in Kuwaiti organizations are not making the most out of translating HR analytics [5].

HRM in the State of Kuwait (Kuwait) and the Gulf Cooperation Council (GCC) countries is slowly being taken up. Not a lot of lessons have taken into its significance and evaluate its application in the Kuwaiti labor market. The aim of the research is to construct an extensive exploration plan due to the scope of the research, which intends to concentrate on analyzing existing human resource management (HRM) and HR analytics literature and evaluate the extent to which HRM and HR analytics are currently studied in the context of Kuwait. The plan explores research vortex, exploring HR analytics, HRM, and data-analytics definitions, the dual role of HRM and overview discussion on the contribution to analyze employee behavior or other alternatives in Kuwait and the benefits of HR analytics' decisions for Kuwait organizations, as well as the enablers and limitations of HR analytics. First, in Kuwait, to the best of our knowledge, HR analytics has received but limited attention, and in the few cases where it has been examined or practiced, it was done on a mostly sporadic and anecdotal manner. Second, HR analytics has been found to inform theoretical and educational contributions in HRM and evidence-based management, as well as to provide direct practical help in monitoring and assessing HR activities and predicting workforce behavior and performance. Third, HR analytics are important for Kuwaiti organizations because they are encouraged to recruit, retain, and develop talented Kuwaitis [6, 7, 8, 9]. Enhancing human capital is a major pillar in Kuwait as the Kuwait National Development Plan, known as "New Kuwait 2035," was established with the aim of establishing a cohesive national framework for strategic planning in Kuwait [10, 11]. This is accomplished by emphasising the specific areas that Kuwait should prioritise, evaluating performance in comparison to global benchmarks, and pinpointing a series of projects that will have the greatest influence on attaining the desired outcome. The KNDP is centred on seven fundamental pillars. Pillar 2, Creative Human Capital, entails restructuring the education system to enhance the readiness of young individuals to be competitive and creative contributors to the labour force, while also enhancing the effectiveness of education expenditure. Enhancing education and improving human capital are crucial factors in driving the growth of Kuwait's population and achieving the vision while overcoming problems [12, 13].

The organisation of this paper is as follows: Section 2 provides an overview of the existing literature and related studies, while Section 3 details the method employed for the study. Section 4 presents a summary of a case study carried out in Kuwait, which aims to offer valuable insights into a qualitative examination of HRM analytics. Section 5 offers recommendations and highlights challenges, while Section 6 concludes the study by offering a direction for further research.

II. Literature Review

Human resources are vital for shaping the future and success of organizations [14]. Until a decade ago, the human resources department was focused on talent acquisition, salaries, and administrative works only. Currently, these functions do still exist but have undergone a transformation that has replaced many traditional activities with intelligent solutions to ensure that the bottom line of any workforce will be assisted towards growth. According to [15], HR management analytics can greatly improve the performance of a workforce. The right talent for the right job, skills development, and effective performances are among the factors that depend on the available HR data [16]. This study carried out a critical review to explore recent literature, where HR analytics are implemented or proposed to be implemented. This literature is useful in recognizing the future direction of HR management analytics.

HR analytics has been defined as the system of collecting, measuring, and analyzing various types of data to improve workers' productivity and achieve cost benefits [17]. HR analytics was also defined as business management practice that consists of making strategic decisions based on the analysis of workforce data through evidence-based decisions to enhance a company's growth [3]. The Society of Human Resources Management (SHRM) points out two main focuses of HR analytics: Cost reduction and improving the skills of the workforce so that companies can continue to operate effectively. [18] says that HR analytics can be seen in two approaches: The data-driven approach, which is the early one, and the business-driven approach, which considers the status of the companies, as well as the external environment. The practice of HR analytics has become valued since Google used the concept of "People Operation". The estimation is that HR analytics will grow 71% globally between 2013 and 2017. Many companies have begun to gather data and are ready to make better decisions as their HR information grows. According to the HR research institute, 8.6% of participating companies have HR analytics performance to lead in 2013, while 52.4% have it to follow in UAE [19]. Also, HR analytics do not only enhance the workforce but can also provide guidance on the tactical process that requires replacement and workforce skills. Therefore, HR analytics, in addition to predicting performance, can drive towards creating an effective workforce. Moreover, the more advanced and precise HR analytics system measurements are expected to encourage companies to embrace best practices in this area [2].

Internal HR analytics and competence management are strategic tools of HR, and it is possible to assess staffing requirements for the future and compare those with the workforce's current capacities, as well as employee career paths [3, 20]. Furthermore, HR analytics offer decision-making support throughout the employee life cycle [18], for example, in the selection of candidates, and can provide mechanisms to adjust gaps between requirements and workforce capacities. HR analytics also has a significant impact on workforce performance and maintains organizational stability. This is because the deployed practices and strategies of HR analytics have several positive impacts on human resource management, and many organizations worldwide have been using those strategies not only on a regular basis but also to manage and measure the effectiveness of their practices [21]. These tools allow organizations to check which measures are successful, investments are profitable, and future potential for change. A well-known strategy has ramifications for both personnel development and the recruiting process, which is considered by organization worldwide to be effective. In any organization, the adoption of HR analytics and other HR technologies has a positive effect on staff performance, as it provides various important results [18].

The study undertaken by [1] sought to examine the influence of data analytics and robots on the performance of companies throughout Europe. Evidence indicates that human resource management practices (HRMP) are pertinent in elucidating organisations' earnings. Human resource strategies and technology are mutually supportive resources that contribute to achieving superior outcomes. A strong and statistically significant correlation was discovered between earnings and the utilisation of data analytics for the purpose of monitoring employee performance. Furthermore, the study revealed strong and meaningful correlations between human resource practices and profitability. The article provides insights into the impact of technological and human variables on profitability, highlighting the importance of human resource strategy and technology in achieving company objectives. [1].

The Author [22] contend that the digitalisation of Human Resource Management (HRM) is a highly debated subject in contemporary scholarly research. Their research investigated the evolution of strategic HRM through the use of big data and artificial intelligence (AI) technology, and its influence on corporate performance. The study examines many problems, including the influence of digital technologies on strategic human resource management (SHRM) and how big data and AI technologies contribute to the strategic advancement of HR. Additionally, the study investigates the role of technology in the evolution of HR from 1945 to the present. The analysis reveals that advancements in technology necessitate a corresponding evolution in the management of human resources within businesses. Furthermore, this paper examines the significance of employing big data and artificial AI technology in human resources (HR) operations [22]. Similarly, a study undertaken by Jyoti, [23] aimed to evaluate the influence of Human Resource Management Practices on Teachers' Performance using HR Analytics. The findings of this study indicate that HR practices, specifically training and development, performance management, performance appraisal, and empowerment, have a favourable impact on teachers' performance. The study is of a cross-sectional design and specifically examines the performance of teachers.

[15] conducted a study in Bangladesh to identify the primary factors that influence the adoption of AIbased technologies in recruitment. They used the unified theory of acceptance and use of technology (UTAUT) model, along with perceived credibility and moderating variables, as their framework for analysis. The study's findings indicate that all of the expected associations were found to be statistically significant, with the exception of the extended variable of perceived credibility. Nevertheless, there was no evidence of gender or business size having any moderating effect on the hypothesised premises. Furthermore, [23] conducted a systematic literature survey to investigate the correlation between Human Capital Management, Human resource analytics, and Organisational performance. The authors constructed a theoretical framework to investigate the correlation between the elements of Human Capital Management (HCM) and its impact on organisational performance, with the involvement of HR analytics as a mediator. The systematic study confirmed the validity of the suggested conceptual model and demonstrated that HR analytics enable organisations to monitor their human capital management, leading to enhanced organisational performance. In addition, the research conducted by [17] demonstrates that the use of workforce analytics can greatly improve the capacity of leaders and managers to accomplish their operational and strategic goals by enhancing workforce management [24]. However, taking advantage of these changes will necessitate HR and line managers to acquire a thorough comprehension of how the workforce contributes to their company's strategic triumph. This comprehension must be evident in the workforce metrics and analytics they create and implement.

The Middle East region, particularly the Gulf Cooperation Council countries, has experienced a significant shift in the labor market dynamics in recent years [25]. As the oil-based economies strive to diversify and move towards a knowledge-based economy, the role of human capital has become increasingly crucial [26, 10, 27]. Kuwait, as one of the Gulf nations, is no exception to this trend. Within this context, the education and workforce development systems in Kuwait play a critical role in supporting human capital

development and aligning the skills of the Kuwaiti workforce with the evolving labor market [5, 28]. However, the literature suggests that there are significant challenges in bridging the gap between the educational system and the private sector's labor demands in Kuwait, which has led to an overreliance on foreign labor crucial [26]. Additionally, the Kuwaiti government's employment policy, which has traditionally acted as the employer of first and last resort for Kuwaitis, has contributed to a segmented labor market, misallocation of labor, and an escalate public sector wage bill [29]. To address these challenges, the utilization of Human Resource Management analytics can play a crucial role in enhancing the Kuwaiti workforce.

III. Methodology

Research Design

The research design of this study is an intentionally systematic investigation aiming at drawing an explicit link between HR analytics and the Kuwaiti workforce in describing the current status of the use of HR analytics. This research discovers many new details and offers suggestions that will aid policy makers and researchers. This study is aimed at exploring the impact of using Human Resource management analytics (HR analytics) to gain an understanding of the situation in Kuwait with regards to the use of HRM analytics, this paper utilized a qualitative approach, targeting the enhancement of the Kuwaiti workforce. A qualitative methodology was conducted in which a focus group session was used to collect data, and analysis was used to identify the existing workforce within the Kuwaiti context. This method was used to assess several dimensions of human resource management, analytics, personal traits, job satisfaction, and its relationship with organizational commitment [30, 31, 32, 33]. Thematic analyses were performed to provide a complete understanding and develop meaningful associations.

Focus Group Discussion

An in-depth focus group discussion session was performed with the objective of exploring the perceptions of HR professionals in Kuwait. The discussion guide addressed topics such as Human Resources, the integration of HR analytics, and the Kuwaiti workforce, fostering in-depth debates and offering suggestions for enhancement. The qualitative approach enables a deeper understanding of the reasoning, viewpoints, motivations, attitudes, and other elements of participants, therefore fostering the generation of novel ideas and insights regarding advantages, incentives, and obstacles. A total of 16 participants, consisting of 10 government representatives and 6 persons from the private sector, were selected to take part in a focus group session. The focus of the session was on their unique characteristics, as mentioned in the studies by [34, 35]. The researchers conducted the two-hour session in the seminar room of the College of Business Studies (CBS). The conversation was captured in an audio format with the agreement of the participants and then converted into written form for examination. Thematic analysis was utilised to discern reoccurring themes and patterns within qualitative data. Analytical techniques, such as coding and categorisation, were employed to gain a deeper understanding of the intricate elements of students' perspectives.

IV. HR Analysis And The Workforce: Kuwait Case Study

Overview of Human Resources Practices in Kuwait

During the discussion session, an HR specialist pointed out that government institutions in Kuwait are failing to adhere to the essential principles of HR in their organisations. Many of these institutes mistakenly believe that HR solely involves the processes of employee selection, promotion, and record-keeping. She advocates for government organisations in Kuwait to prioritise fostering strong relationships between employees and management, as this will contribute to the empowerment and effective leadership of the human resource. Several participants contend that HR analytics alone is insufficient; they believe that organisations should first establish professional HR operations before implementing analytical initiatives. It is believed that HR managers should prioritise dedicating a significant portion of their time to interacting with individuals, fostering their abilities, improving their job performance, and formulating solutions to address organisational challenges. Another member from a government organisation contends that clients exhibit greater loyalty towards individual employees rather than the organisation itself [34]. This, fundamentally, is where Kuwaiti organisations derive their human resources edge. He holds the belief that the employee's position becomes crucial, and the manner in which they are supervised and nurtured becomes even more significant. One participant noted that there is a scarcity of research information on HR practices in Kuwait. Moreover, the available research tends to prioritise comparisons with western standards rather than identifying the most effective approaches for the country.

During the discussion session, HR professionals largely concurred that there is a growing inclination towards employing HR analytics in Kuwaiti organisations. This is primarily due to the notable advantages in terms of effectiveness and efficiency that it offers in corporate operations. Although HR analytics has been broadly embraced in Europe, the US, and other countries, its implementation in the government sector in

Kuwait remains restricted. The majority of participants in the focus group, particularly those from the private sector, concur that HR analytics in Kuwait are still in the early stages of development. They observe that most HR departments in banks primarily engage in operational tasks and lack strategic planning. Furthermore, they express the need for additional information on staff members to enhance their effectiveness. A banker observed that certain banks allocate significant resources in terms of time and money to recruit employees for specific roles, only to have them replaced due to their failure to meet the required standards. She expressed scepticism about the accuracy of the reports and dashboards provided by HR, suggesting that some officers view them as merely pleasant stories that do not reflect the truth. This statement highlights that the perceived importance of positive results delivered by HR has diminished compared to its previous level of significance. HR analytics has been implemented in Kuwait, leading to an increased demand for personnel to create and utilise it.

Impact of HR Analytics on the Kuwaiti Workforce

Prior to querying the participants on the influence of HR analytics on the workforce in Kuwait, the authors of this study introduced relevant research findings from the literature. They refer to [21] who have shown that HR analytics can offer empirical and evidence-based information to assist HR professionals in making well-informed decisions pertaining to different HR tasks. In addition, they provided a literature analysis that demonstrates the use of HR analytics into several human resource management tasks, such as selection, employee engagement, retention, and performance appraisal. Insights derived from analytical methods can offer solutions for identifying training requirements and developing HR strategies that align with organisational demands. These insights can also aid in attracting and retaining people to achieve optimal performance within the organisation. In addition, the implementation of human resource analytics resulted in a rise in employees' productivity [3].. HR can utilise predictive studies to assess the probable emotions of employees at various stages of their professional life cycle [14]. The participants largely concur with the aforementioned statement. vet it was generally agreed that HR analytics have been implemented in Kuwait to enhance recruitment procedures and optimise the selection process by using modern technology. Nevertheless, it was noted that only a limited number of organisations in Kuwait acknowledge the rise in productivity attributed to training. This issue is directly linked to the challenge that these organisations encounter in establishing explicit links between training programs and the influence they have on business. It is emphasised that by analysing data on workers and their connection to company outcomes, it is possible to bring employees to a high-performing level and keep them for a longer period of time. It is recommended that HR departments should consider developing an HR analytics system that utilises direct and career-specific data to analyse correlations with the local job market and assess the compatibility of employees with the job market in the country [35]. All participants of the focus group agree with the following issues regarding the impact of HR analytics:

Improved Recruitment and Selection Processes

Using HR analytics to enhance the recruitment and selection processes in Kuwaiti organizations has many benefits. Employing HR analytics helps organizations make more informed and data-driven decisions about their recruitment and selection processes. They can identify the most effective recruitment sources and selection methods for different roles and identifying profiles for both top and low-performance workers, which can be used to define job description candidates. They stated that the use of HR analytics also enables organizations to build their model of the "ideal" candidate. Based on the profiles of top performers, various sources can be identified that are providing candidates with the background, experience, and education suitable to fulfil a particular role. It was discussed that the use of HR analytics in Kuwait has the potential to be a gamechanger from a preliminary selection perspective by being able to help in identifying the "best-fit" candidate right from the start, which obviously can have long-term cross-financial and productivity benefits. There are several studies that have demonstrated positive impacts for the use of HR analytics on recruitment initiatives [5, 36].

Enhanced Employee Engagement and Retention

During the session, HR specialists assert that employee engagement assesses the degree of excitement and dedication displayed by individuals inside an organisation. Increased employee interest and involvement in their work directly correlates with higher levels of engagement, leading to a favourable impact on productivity. Practices that prioritise training and career development are linked to increased employee engagement. To foster new opportunities and ensure long-term success, firms must allocate resources towards the development and growth of their workforce. This entails prioritising the integration of employees' professional aspirations with the goals and objectives of the organisation. Strategies aimed at promoting employee happiness and retaining valuable personnel involve boosting employee empowerment, strengthening communication and involvement, and prioritising an organization-wide commitment to safety, ethics, and corporate social responsibility. According to them, these approaches offer the benefit of not only keeping valuable personnel,

but also influencing the degree of employee engagement. Nevertheless, certain participants argued that implementing this advice may not be feasible for small organisations due to their limited job prospects and tiny workforce, which could result in delayed promotion processes.

Optimized Training and Development Programs

HR analytics is believed by many HR professionals to facilitate a focused approach to development initiatives. This involves identifying existing areas for improvement and leveraging them to strengthen the organization's competitive edge. By basing the training and development process on practical information, the appeal and effectiveness of employees' development efforts are significantly improved. This mandates the workforce management to predict and educate personnel, avoid training options, and provide advanced learning routes for various staff members [37, 38]. In addition, this step also shifts workforce planning to a skill-based approach, focusing on policymakers and tacticians rather than boosting morale. Some individuals argued that HR analytics can establish a connection between the return on investment for training and development projects and performance events [39, 40, 41], as well as promoting online self-learning [42]

More Statements from Focus Group Participants

The following remarks are hypothetical and were extracted from our recorded focus group discussion with 16 HR experts in Kuwait. The topic revolved around the use of HR analytics in both private and government organisations:

- "HR analytics can help us better understand employee engagement and satisfaction, leading to more effective retention strategies in both sectors."
- "In the private sector, HR analytics have already shown benefits in optimizing recruitment processes through identifying the most successful sourcing channels and candidate profiles."
- "Government organizations in Kuwait could use HR analytics to streamline their processes, particularly in areas like promotions and performance evaluations."
- "One challenge we face is the integration of HR analytics tools with existing systems in government organizations, where legacy systems are common."
- "Data privacy and security are critical concerns when deploying HR analytics, especially in the public sector, where sensitive information is involved."
- "There's a noticeable skills gap in HR teams when it comes to understanding and leveraging data analytics. We need more training and education in this area."
- "HR analytics can provide insights into diversity and inclusion initiatives, helping organizations to track progress and identify areas for improvement."
- "While private companies are quicker to adopt new technologies, government bodies often face more bureaucratic hurdles, slowing down the implementation of HR analytics."
- "The use of predictive analytics in HR could help forecast future workforce needs, which is crucial for strategic planning in both private and public sectors."
- "There's a need for a cultural shift in how data is perceived and utilized within organizations, moving from intuition-based to data-driven decision-making."
- "Incorporating HR analytics can help in identifying high-potential employees and tailoring development programs, accordingly, enhancing leadership pipelines."
- "One of the main advantages of HR analytics is its ability to provide real-time insights, allowing for more agile decision-making."
- "We see a lot of potential in using analytics to manage talent acquisition more effectively, particularly in identifying and reducing biases in hiring processes."
- "Government organizations can benefit from HR analytics to better understand employee turnover and identifying factors that contribute to high attrition rates."
- "HR analytics can help organizations in Kuwait align their HR strategies with overall business goals, ensuring that HR initiatives support broader organizational objectives."
- "There is some resistance to adopting HR analytics, particularly in more government sectors, where there's a reluctance to rely on data over human judgment."
- "HR analytics can help optimize workforce costs by analyzing data on overtime, absenteeism, and productivity, helping organizations manage their budgets more effectively."
- "Both private and public sectors can use analytics to improve employee wellness programs via identifying the most common health issues and tailoring interventions accordingly."
- "One key benefit of HR analytics is its potential to enhance employee experience via providing personalized recommendations for career development and training."

• "The future of HR in Kuwait will likely involve a greater emphasis on data literacy, with HR professionals needing to be skilled in both human relations and data analysis."

These statements reflect a range of perspectives and considerations from HR professionals on the potential benefits, challenges, and implications of deploying HR analytics in Kuwait's private and government sectors.

V. HR Analysis And The Workforce: Kuwait Case Study

According to the literature reviews and the analysis provided in the previous sections, it is evident that HR analytics can enhance human resource management systems in Kuwait by assisting in the improvement of employee recruitment, selection, development, and retention. Several European organisations have established internationally recognised standards in HR analytics, and it would be beneficial for Kuwaiti organisations to acquire knowledge from them. Hence, it is advisable for Kuwaiti organisations to allocate resources towards enhancing their HR analytics capabilities. This section provides recommendations and challenges for the implementation of HR analytics in Kuwaiti organisations. These are derived from the theories and data that were examined during the course of this investigation. Kuwaiti organisations are advised to examine the following techniques while using HR analytics in their organisations.

Recommendations:

Align HR Analytics with National Goals

Deploying HR analytics effectively to align with a Kuwait's vision, such as Kuwait's Vision 2035, requires strategic planning and a clear focus on how data-driven insights can support national goals [12]. Therefore, it is essential to ensure that HR analytics initiatives are directly aligned with the key pillars of Kuwait 2035 vision, such as economic diversification, workforce development, and enhancing the human capitals. For example, utilise HR analytics to detect deficiencies in skills within vital industries that are crucial for the economic advancement of the country [43]. Then, create curriculum development and focused training programs to tackle these deficiencies.

Develop HR Analytics Capabilities

Our investigation of HRM analytics capabilities reveals that HR managers with little expertise mostly rely on experience and intuition when it comes to HRM work practice and HRM systems. Developing HR analytics capabilities provided clarity on the potential path for enhancing HR analytics capabilities for individuals involved in creating the organization value. This provides recommendations for the development of HRM analytics, taking into account the current capabilities and limitations. Additionally, it elucidates the approach employed to ascertain and cultivate a set of principles for enhancing HR analytics capabilities, as well as four prospective alternatives for the focus of HR analytics endeavours. These suggestions can assist organisations in developing their own organisational capacity to enable the use of HRM analytics. Furthermore, the guidelines provided below operate as clear indicators of steps that can be performed to either establish a new HR analytics capability or to advance a specific area of focus in data-driven management projects. These scenarios can be executed in a workshop format to determine which one is most applicable and adaptable to your organisation.

Develop National HR Analytics Standards

Develop standardised and universally applicable criteria and recommendations for HR analytics to guarantee uniformity and comparability among different organisations. This involves establishing key performance indicators (KPIs) that are in line with national development objectives, such as worker productivity, employee engagement, and retention rates.

Invest in Data Infrastructure and Technology

For every organisation that wants to track its HR analytics and data, investing in data infrastructure is an essential and difficult task. Utilising individual data for decision making necessitates dependable, current data and a series of procedures that guarantee the regular and constant production of this data. Data infrastructure encompasses the necessary technical and infrastructural elements required to generate high-quality HR data. From a technology standpoint, it is imperative for an organisation to allocate resources towards implementing systems that enable them to efficiently acquire, retain, and process substantial volumes of data from diverse origins. Cloud computing is frequently suggested as a means to store and utilise the substantial amount of data needed for most people analytics projects as well as AI analytical applications.

Build a Data-Driven Culture

Establishing a culture that relies on data analysis and data-driven decision-making is widely recognised that numerous organisations in the Gulf Cooperation Council (GCC) region possess substantial quantities of data saved on their servers. The question remains: do organisations employ it when making new investment decisions? What is the current state of affairs in Kuwait? As an illustration, within the banking industry, the Central Bank of Kuwait [44] expressed its intention during the 4th Annual HR Forum in Kuwait to assume a more prominent position in overseeing human resources. Regrettably, a significant number of senior executives rely on their intuition and personal preferences to determine human resource management policies. Thus, it is necessary to first map and analyse data in order to provide reports that can effectively advise and substantiate HRM strategy throughout the institutions. The authors propose that fostering a data-driven culture in Kuwait will enable the realisation of the full potential of HRM Kuwait [4, 45]. There is evidence indicating that when the importance of reporting decisions to managers in human capital management (HCM) is recognised as a fundamental principle, decision-makers begin to make judgements that are focused on analysis and data.

Practice Curriculum Development

The utilization of Human Resource Management analytics has great promise for improving curriculum development. By harmonising the educational system Hence, it is crucial to ascertain the skills and abilities demanded by the labor market and thereafter synchronise the educational curriculum and vocational training programs accordingly [46]. This can facilitate the narrowing of the disparity between the availability and requirement of proficient workforce, hence diminishing the dependence on foreign labourers.

Support the Growth of the Knowledge Economy

Human Resource analytics may aid in the strategic planning and effective management of the workforce, allowing both the government and private sector to gain a comprehensive understanding of the Kuwaiti workforce, including their professional goals and the potential for enhancing their skills and acquiring new ones. This can unlock the full potential of its human capital and pave the way for a more diversified, knowledge-based economy.

Promote Innovation in Employment Policies

Utilising Human Resource analytics may assess the efficacy of Kuwaiti employment laws and pinpoint areas that need enhancement, thereby guaranteeing a fairer and more effective distribution of labour in both the public and private sectors. This will facilitate the development of talent management and employment strategies that align with the changing demands of the labour market.

Focus on Inclusivity and Diversity

Utilise HR analytics to oversee and advance diversity and inclusion within the workforce. This can contribute to ensuring equitable distribution of economic growth and promoting workforce inclusivity by encompassing individuals from many demographic groups, including males, females [47], elderly individuals, and disabled workers, considering cultural and social issues [48].

Ensure Data Privacy and Security

Enforce robust data privacy and security protocols to safeguard confidential employee data. Ensuring compliance with national data privacy legislation is essential for retaining trust in HR analytics.

Measure and Report on Impact

Frequently assess and document the effects of HR analytics projects in alignment with the country's long-term vision for 2035. This exemplifies the significance of data-driven HR processes and reinforces the concept of ongoing enhancement.

Challenges:

One of the primary constraints of using HR analytics is that factual information may intimidate workers, especially those who are part of an inclusive organisation. Moreover, employing strategies to predict and assist workers can result in selection bias. The implementation of HR analytics in Kuwait may encounter certain limitations, such as the conservative nature of the knowledge economy, which may not fully comply with certain principles of human resource management. Key challenges encountered when implementing HR analytics in Kuwait include issues surrounding data disclosure, the general framework for utilising statistical analysis in HR management, and specific difficulties related to managing potential biases in metrics. These biases may arise from privacy concerns or individuals' limited understanding of analytics in decision-making.

Empirical evidence indicates that there are numerous challenges associated with the integration of technological advancements in key areas such as the knowledge society and HR analytics inside the knowledge

economy. Despite the significant emphasis on analytics, several organisations fail to acknowledge the possible challenges and obstacles associated with its adoption. Nevertheless, the unavoidable nature of workplace transformations and technology advancements will impact the demand for a proficient workforce, hence presenting significant opportunities to analyse the qualities and responsibilities within human resource management and to investigate the potential advantages of utilising statistical data on individuals. The current skills gap limits the ability of many businesses to properly utilise human resource planning and decision making. HR and analytics are collaborating to explore novel opportunities for forecasting HR and business trends, enhancing corporate decision-making, and strengthening our workforce's talents and competencies. Organisations often face similar barriers that can have a big impact.

Organisations globally are keen to anticipate the challenges they may encounter prior to embarking on the implementation of HR analytics in a knowledge-based economy. Deploying any technology, system, or process requires analysing the infrastructure and implementing or integrating the necessary software [49]. In order to ensure success and promote effective decision-making. HR professionals and user departments must possess a good level of technological proficiency to operate and maintain the system [50]. The deployment of HR analytics requires the integration of processes, which necessitates changes to be adopted at all levels of the organisation, from the lowest to the highest management. Thus, training assumes a key role in the organisation. Given the continuous progress in technology, it is imperative to provide staff with appropriate training. Ensuring data security within an organization's facilities is a significant concern. In order to address this problem, it is imperative that employees possess a clear understanding of the implementation of the process and the necessary safeguards to prevent the occurrence of such issues. Considering employees' extensive work experience, significant presence in the 2017 Kuwait labour market, and lack of education in HR analytics, it is unquestionably important for them to undergo re-training in the field of HR analytics [4]. The Kuwait government should also contemplate strategies to promote the participation of women in the field of HR analytics, in order to prevent male dominance from reaching a level that perpetuates a glass-ceiling scenario. There is a correlation between the digital disruption of work and the increased demand for a different set of skills in the field of HR and HR analytics.

VI. Conclusion And Future Research Directions

Technology will play a dominant role in shaping the future of work, resulting in a workforce primarily composed of knowledge or information-based businesses. The primary focus of the organizations will involve acquiring and managing valuable and trustworthy information to support firms in streamlining their operations within the human resource management (HRM) departments. The objective of this article is to improve the global workforce, with a specific focus on Kuwait. Kuwait is an increasingly multicultural environment that is focused on educating and developing national human resources to better fit with the goals and objectives of the shadow. The purpose of using HR analytics is to ensure that employees in any organisation are meeting the established goals, objectives, and standards. Identifying the areas where employees fail to meet the organization's standards, based on its requirements. This paper presents a summary of the findings from an investigation of HR Analytics on the Kuwaiti workforce in recent years. The authors provided recommendations explicitly addresses the underdeveloped and under-researched areas of HR Analytics that our empirical work at the front-line has identified. Based on our direct experience consulting with HR professionals in a focus group session, we suggest that conducting additional empirical research in the Kuwaiti context would be timely and would provide more understanding of the specific ways in which HR Analytics are perceived, carried out, and shared within and outside of Kuwait.

Future study in this field could be enhanced by focussing on the philosophical, humanistic, ethical, and political implications of using HR data, metrics, and measures in Kuwait. An approach that is more focused on theory and ethics would be in line with the current trend of examining data and AI in HR Analytics from a critical perspective. Further research should aim to investigate the extent to which HR professionals are expected to critically analyse the findings of empirical analytics. Additionally, it should explore the specific situations in which assumptions about statistical objectivity are being challenged, with a focus on the implications for HR and organisations.

To summarise, although we have attempted to determine our future research directions based on empirical evidence, these directions themselves do not contribute to the existing body of knowledge. Referring to the little existing empirical research on HRM and HR Analytics in Kuwait, it is challenging to identify any significant areas that would not gain from additional empirical investigation. Moreover, doing this innovative study would enhance the advancement of effective methods in this particular situation by identifying any distinctive features that define the establishment and utilisation of HR analytics in Kuwait.

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References

- [1] A. Erro-Garcés and M. Aramendia-Muneta, "The role of human resource management practices on the results of digitalisation. From Industry 4.0 to Industry 5.0," *Journal of Organizational Change Management*, 2023.
- [2] J. Jyoti, P. Sharma and A. Rani, "Assessing the Impact of Human Resource Management Practices on Teachers' Performance through HR Analytics," in *Sustainable Business Practices for Rural Development*, Palgrave Macmillan, Singapore. https://doi.org/10.1007/978-981-13-9298-6 11, 2020.
- [3] M. Arora, A. Prakash, A. Mittal and S. Singh, "HR Analytics and Artificial Intelligence-Transforming Human Resource Management," in *International Conference on Decision Aid Sciences and Application (DASA)*, 2021.
- [4] O. Abidi, H. Zaim, D. Youssef, H. Habibniya and A. Baran, "Diversity Management and Its Impact on HRM Practices: Evidence from Kuwaiti Companies," doi: 10.17015/EJBE.2017.020.05, 2017.
- [5] B. Almutairi and K. Arabiat, "The Impact of Human Resource Management Practices and Job Satisfaction on Employee Performance in the Ministry of Foreign Affairs of Kuwait," *Journal of the University of Shanghai for Science and Technology, doi:* 10.51201/JUSST12683, 2021.
- [6] A. Al-Hunaiyyan, S. Al-Sharhan, S. Alainati and M. Al-Duaij, "A New Competency Model for Digital Instructors: Towards Innovative Teaching and Learning In The Digital Era," *Journal of Data Acquisition and Processing*, 2023, Vol. 38, Issue 4, https://www.sjcjycl.cn/article/view-2023/04-1167.php, pp. 1167-1186, 2023.
- [7] S. Alainati, A. Al-Hunaiyyan, R. Alhajri, F. Alahmad and H. Alkhatib, "Perceptions of Online Learning Among Instructors: How to Maximize Instructors' Competencies in Virtual and Blended Learning.," *International Journal of Professional Business Review, Vol.8* No. 11, e03924, 2023C.
- [8] S. Alainati, A. Al-Hunaiyyan and H. Alkhatib, "Instructors' Digital Competencies for Innovative Learning: Human Resource Management Perspectives," *International Journal of Professional Business Review*, 8(10), e03750. https://doi.org/10.26668/businessreview/2023.v8i10.3750, 2023B.
- [9] S. Alainati, "Instructors' Competency Model During COVID-19 Crisis: Human Resource Management Perspective," IOSR Journal of Business and Management (IOSR-JBM). Volume 23, Issue 10. er. II, pp. 29-39, 2021A.
- [10] S. Alainati, "Enhancing Human Capital: A Case Study of Kuwait's Educational System and Twenty-First Century Skills," The International Journal of Business & Management, 12(1). Retrieved from https://www.internationaljournalcorner.com/index.php/theijbm/article/view/173458, 2024A.
- [11] S. Alainati and A. Al-Hunaiyyan, "The Role of Educational Systems in Developing the Twenty-first Century Skills: Perspectives and Initiatives of Gulf Cooperation Council Countries," *Journal of Research Administration. Vol. 06 No.1*, 2024B.
- [12] S. Wafa, "White Paper for the Human Capital Pillar: Building Kuwait's Future Human Capital for the Knowledge-Based Economy," The Kuwait Public Policy Center, https://kppc.scpd.gov.kw/sites/default/files/2020-04/01-HC-White-Paper-KPPC-PRINT_2.pdf, Kuwait., 2019.
- [13] Kuwait National Assembly, "Constitution of the state of Kuwait," Kuwaiti: National Assembly Press, 2011.
- [14] A. Abellán-Sevilla and M. Ortiz-de-Urbina-Criado, "Smart human resource analytics for happiness management," *Journal of Management Development, Vol. 42 No. 6. https://doi.org/10.1108/JMD-03-2023-0064*, pp. 514-525, 2023.
- [15] M. Islam, A. Mamun, S. Afrin, G. Ali Quaosar and M. Uddin, "Technology Adoption and Human Resource Management Practices: The Use of Artificial Intelligence for Recruitment in Bangladesh," *South Asian Journal of Human Resource Management*, 9,, 2022.
- [16] T. Kimura, "Assessment of Personal Values for Data-Driven Human Resource Management," Data Sci. J., 22, 2023.
- [17] M. Huselid, "The science and practice of workforce analytics: Introduction to the HRM special issue," *Human Resource Management*. 57. 10.1002/hrm.21916., pp. 679-684, 2018.
- [18] G. Bandi, T. Rao and S. Ali, "Data Analytics Applications for Human Resource Management," in *International Conference on Computer Communication and Informatics (ICCCI)*, 2021.
- [19] Q. Mahmood, R. Ahmed and S. Philbin, "The moderating effect of big data analytics on green human resource management and organizational performance," *International Journal of Management Science and Engineering Management*, 18, pp. 177 189, 2022.
- [20] S. Alainati, F. Al-Hammad and R. Alhajri, "Instructors' Perceptions, Motivations, and Competences in e-Learning: The Case of College of Business Studies – Kuwait," *Journal of Business and Management (IOSR-JBM)*, 2023D.
- [21] S. Arora and S. Upadhyay, "HR Analytics: An Indispensable Tool for Effective Talent Management," in *Data-Driven Decision Making. https://doi.org/10.1007/978-981-97-2902-9_11*, Palgrave Macmillan, Singapore, 2024.
- [22] C. Zehir, "The Role Of Strategic Human Resource Practices On Business Performance," in ICLTIBM 2017 7th International Conference on Leadership, Technology, Innovation And Business Management. 366-376. DOI: 10.15405/epsbs.2019.12.03.30., 2019.
- [23] A. B. Senathirajah, S. Alainati, R. Haque, S. Ahmed, M. I. Khalil and B. Chowdhury, "Antecedents and Consequence of Trust -Commitment Towards Artificial Based Customer Experience," UCJC Business and Society Review Vol. 21, Issue 80, https://journals.ucjc.edu/ubr/article/view/4572, 2024.
- [24] V. Kiran, V. Shanmugam, R. Raju and J. Kanagasabapathy, "Kiran, V.S., Shanmugam, V., Raju, R.K., & Kanagasabapathy, J.R. (2022). Impact of Human Capital Management on Organizational Performance With the Mediation Effect of Human Resource Analytics," *International Journal of Professional Business Review*, 2022.
- [25] S. Alainati, N. Almonawer and F. Al-Hammad, "Transformational Leadership in Education: Review of Literature," *The International Journal of Business & Management*, 11(2). https://doi.org/10.24940/theijbm/2023/v11/i2/BM2302-016, pp. 73-88, 2023A.
- [26] M. Shayah and Z. Sun, "Employment in the Gulf Cooperation Council (GCC) Countries Current Issues and Future Trends," in Proceedings of the 2nd International Conference on Social Science, Public Health and Education (SSPHE 2018).

- https://doi.org/10.2991/ssphe-18.2019.94, 2019.
- [27] M. Achoui, "Human resource development in Gulf countries: an analysis of the trends and challenges facing Saudi Arabia," *Human Resource Development International*, 12(1), https://doi.org/10.1080/13678860802638826, p. 35–46, 2009.
- [28] S. Alainati, "Towards a Coprehensive Knowledge Management-Competency Model," *IOSR Journal of Business and Management (IOSR-JBM). Volume 23, Issue 11*, pp. 11-23, 2021E.
- [29] A. Al-Hunaiyyan, R. Alhajri, S. Al-Sharhan and B. Al-Ghannam, "Factors Influencing the Acceptance and Adoption of Online Learning in Response to the COVID-19 Pandemic," *International Journal of Web-Based Learning and Teaching Technologies (IJWLTT). Vol. 16 (6)*, pp. 1-16, 2021A.
- [30] A. Al-Enezi, "KUWAIT'S EMPLOYMENT POLICY: ITS FORMULATION, IMPLICATIONS, AND CHALLENGES," International Journal of Public Administration, 25(7). https://doi.org/10.1081/PAD-120004109, p. 885–900, 2002.
- [31] P. X. Lee, S. Alainati, F. Alahmad, A. R. b. S. Senathirajah, Majid bin Md. Isa, Rasheedul Haque and S. Hariharan, "Factors Impacting Job Hopping Behaviour Among Finance Professionals: Towards Improving Employment Policy," *International Journal of Operations and Quantitative Management*, 2023, 29(2), p. 360–377, 2023.
- [32] L. Q. Ying, A. Senathirajah, S. Alainati, Rasheedul Haque, Majid bin Md. Isa, G. Ramasamy and H. N. Krishnasamy, "Strategic Human Resource Management Factors Influencing Job Satisfaction in Malaysian Audit Firms: Towards Improving Employment Policy," *International Journal of Operations and Quantitative Management, 2023, 29(2)*, p. 316–339, 2023.
- [33] Md. Ibrahim Khalil, Rasheedul Haque, Abdul Rahman Bin S Senathirajah, S. Alainati, H. Alkhatib, A. Saif and B. Chowdhury, "An Analysis of Structural Path Modelling of CSR Dimensions with the Mediation Effect of Customer Demand and Satisfaction on Revisit Intention," *International Journal of Operations and Quantitative Management*, 2023, 29(2), p. 406–430, 2023.
- [34] Liew Chit Wai, Majid Bin Md. Isa, Pratikshya Bhandari, A. Senathirajah, Rasheedul Haque, Syriac Nellikunel Devasia and A. Al-Hunaiyyan, "Factors Influencing Job Satisfaction to Ensure Sustainable Growth amongst Family-Owned Organizations in Malaysia," Kurdish Studies, 12(1), Retrieved from https://kurdishstudies.net/menu-script/index.php/KS/article/view/1608, p. 3144–3173, 2024.
- [35] R. Alhajri and A. Al-Hunaiyyan, "Integrating Learning Style in the Design of Educational Interfaces," ACSIJ Advances in Computer Science: an International Journal, Vol. 5, Issue 1, No.19, January 2016. ISSN: 2322-5157, 2016.
- [36] R. Alhajri, S. Al-Sharhan, A. Al-Hunaiyyan and T. Alothman, "Design of educational multimedia interfaces: individual differences of learners," in *Proceedings of the Second Kuwait Conference on e-Services and e-Systems*, Kuwait, 2011.
- [37] U. O. Francis, Rasheedul Haque, A. R. b. S. Senathirajah, A. Al-Hunaiyyan, S. Alainati, Farha Zafira Agos Lokman and Majid Bin Md. Isa, "The Impact of Digital Marketing on Consumer Purchasing Behaviour," *International Journal of Operations and Quantitative Management, Volume 29, Number 2 September 2023*, pp. 378-405, 2023.
- [38] World Economic Forum, "The future of jobs: Employment, skills and Workforce Strategy for the Fourth Industrial Revolution," http://reports.weforum.org/future-of-jobs-2016/: World Economic Forum, 2016.
- [39] X. Huang, F. Yang, J. Zheng, C. Feng and L. Zhang, "Personalized human resource management via HR analytics and artificial intelligence: Theory and implications," *Asia Pacific Management Review*, 2023.
- [40] A. Al-Hunaiyyan, R. Alhajri, A. Alzayed and B. Alraqqas, "Towards an Effective Distance Learning Model: Implementation Framework for Arab Universities," *International Journal of Computer Application. Volume 6, Issue 5, September-October*, 2016.
- [41] N. Al-Huwail, S. Al-Sharhan and A. Al-Hunaiyyan, "Learning Design for a Successful Blended E-learning Environment: Cultural Dimensions," *INFOCOMP. Journal of Computer Science, Volume 6 No. 4*, pp. 60-69, 2007.
- [42] S. Al-Sharhan, A. Al-Hunaiyyan and W. Gueaieb, "Success Factors for an Efficient Blended eLearning," in *Proceeding of the 10th IASTED Internet and Multimedia Systems and Applications (IMSA 2006) Conference*. 14/8/2006 16/8/2006, Honolulu, Hawaii, USA., 2006.
- [43] N. Wickneswary, A. Senathirajah, R. Haque, Lester Naces Udang, Zahir Osman, S. Alainati, A. Al-Hunaiyyan, Majid Bin Md. Isa and Ganesh Ramasamy, "Factors Influencing College Students' Educational Enrolment Choice in Private Higher Education Institution in Klang Valley, Malaysia," Kurdish Studies, Feb 2024 Volume: 12, No. 2, ISSN: 2051-4883. DOI: https://doi.org/10.58262/ks.v1, pp. 3674-3693, 2024.
- [44] A. Al-Hunaiyyan, S. Alainati, R. Alhajri and N. Alhuwail, "Evaluation of Microsoft Teams as an online learning platform: Investigating User Experience (UX)," *Journal of Research Administration. Vol. 06 No. 1*, 2024.
- [45] S. Alainati, "Developing Human Resource Competency Model for Government Sectors in Kuwait," *The International Journal of Business and Management, doi:* 10.24940/theijbm/2022/v10/i4/bm2204-013, 2022.
- [46] S. Elbanna, S. Obeidat, H. Younis and T. Elsharnouby, "Development of Gulf Cooperation Council human resources: an evidence-based review of workforce nationalization," *Employee Relations, doi: 10.1108/er-08-2022-0401, 2023.*
- [47] A. Al-Hunaiyyan, Design of Multimedia Software in Relation to Users' Culture. Ph.D thesis, University of Hertfordshire, UK, 2000.
- [48] S. Alainati, "Towards an Effective Competency-based Education and Training Model," *IOSR Journal of Business and Management (IOSR-JBM) 23 (11)*, pp. 31-40, 2021B.
- [49] A. Al-Hunaiyyan, R. Alhajri, S. Al-Sharhan and A. Bimba, "Human-Computer Interaction Perspective on Mobile Learning: Gender and Social implications," *International Journal of Interactive Mobile Technologies (iJIM). Vol. 15, No. 11, 2021B.*
- [50] A. Al-Hunaiyyan and S. Al-Sharhan, "The design of multimedia blended e-learning systems: Cultural considerations," in 3rd International Conference on Signals, Circuits and Systems, SCS, 6 November 2009 through 8 November 2009. DOI: 10.1109/ICSCS.2009.5412342, Djerba, Tusisia, 2009.
- [51] A. Alzayed and A. Al-Hunaiyyan, "A Bird's Eye View of Natural Language Processing and Requirements Engineering.," International Journal of Advanced Computer Science and Applications (IJACSA). Volume 12, No. 5. May 2021, pp. 81-90, 2021.
- [52] ITU, "Digital Skills Toolkit," ITU Publication Production Service, Geneva, 2018.

