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The role of Artificial Intelligence to Empower Public Services for Talent Attraction: A Comparative Analysis for the UAE

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ABSTRACT

The research has investigated broad international best practice as part of policy lessons to analyze empirical evidence on what works and why to provide recommendations for the United Arab Emirates. "UAE Vision 2021" aims to provide a professional and capable workforce, committed to the achievement of the UAE's objectives. National human resource management mechanisms aim to attract, nourish and retain competent and committed public services at both the national and federal levels. The purpose of the study is the role of advanced technologies and artificial intelligence in attracting the most qualified employees. The vital paper has a positivist qualitative content analysis methodology which results in policy that emphasizes mixed performance of transactional and transformational. Influence of performance management, organizational estrangement and leadership behavior with advanced technology application. Success is the attraction and contribution to the implementation of Artificial Intelligence initiatives. Leadership development with good government mechanisms such as modernization, motivation, selection and acquisition, new wages and benefits, knowledge development, performance management, employee participation, career development, rewards, health, work-life balance, and organizational development. Improving practice and legislation, creating attractive work environments and equality of opportunity. Best practice can help UAE public services to attract, develop, and retain a professional and committed workforce capable of quickly adapting to the challenges of major advancements in artificial intelligence and disruptive information and communication technologies today and tomorrow. The work is limited by the fact that not all reports are in the public domain, so it may be exposed in detail.

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Introduction

For decades, advanced technologies and artificial intelligence industry accelerators have improved the efficiency of public services in several countries such as the United States of America, the United Kingdom, and South Korea. Theoretical research has linked advanced technologies and artificial intelligence to the potential transformation of the workforce into multi-task administrative systems and the attraction of multiple task talents to the public service. This new effect of attraction is at the core of the interest of this research. However, this theory-based research language is limited mainly by the number of relevant administrations to test these effects of talent attraction postulated. And although the research on related personnel, talent management, and human capital management practices remains central to public administration theory and research, it is also limited by the administration's readiness to implement the practice.

Background and Rationale

The future requires nations to invest in public institutions, and piecemeal solutions will not work, nor reinventing bureaucracies of the past. The public sector is facing enormous pressure to carefully manage institutional reforms, focus their human resources on the work that is important, and reimagine what is possible. This heroic effort to renew and transform public institutions extends across numerous aspects, including technological interaction, demographic changes, public expectations, public trust, regulation, political constraints, collaboration, and transparency. However, the value proposition of public service must shift from promising job security, stable income, benefits, and defined pensions to a career of meaningful responsibilities, competitive salary, job flexibility, career development with continuous learning, leadership, and engagement opportunities. (Ingrams et al.2020)(Rosenbloom et al., 2022)

The United Arab Emirates' goal is to move towards a knowledge-based economy that harnesses the full potential of the youth to lead the world, capitalizing on their strength, energy, and entrepreneurial spirit. A comprehensive, long-term, and ambitious vision and strategy that evolves work, job that inspires, engage, and deliver better services are essential ingredients for the successful empowerment of public services for Emirati citizens. Consequently, the United Arab Emirates' government is seeking to learn lessons and practical solutions derived from leading global public service employment models. Central to this complex process is choosing talents based on advanced experience, knowledge, and skills, and providing young people and people with special needs with the leadership, engagement, job flexibility, and competitive incentives they need to make the transition, assuming that attracting and retaining talent requires wealthy pay as well.

Research Aim and Objectives

The study aims to carry out a comparative analysis of global best practices of empowering public services to attract talent, specifically leadership and innovation, located in different countries. The study, vis-à-vis the success stories of different countries, will identify the mobile applicability issues within an Artificial Intelligence (AI) and Advanced Technologies and thereafter, will carefully adopt the same within the Emirates' Public Administration. The study will theoretically and empirically test a set of mobile adopting advanced technologies and their influential sectors in a creative and innovative side of public service. For UAE to meet the Sustainable Development Goals, it is essential that its public sector remains adaptive in creative ways dealing with rapidly emerging trends and simultaneously, recognize the impact of technology on creating change and choose both to open the window on opportunities for willful changes.

The research study sets the following objectives to deep dive into the preliminary conceptual idea set of the above aims mentioned as:

To perform a comparative analysis of global best practices of empowering public services to attract talent.

To delineate the available theoretical constructs to attract and retain leadership and innovation in the public sector related to the implementation of advanced technologies and AI in governance/labor markets or any other sectors.

To identify the strong influences of advanced technologies, use in governance/labor markets and other segments of public affairs on the public sector personnel acceptation/retention and their attitude, engagement, satisfaction, agility, and creativity and therefore appraise the appropriateness of public sector human resource policies on the advanced technologies.

It involves exploring the effect that technological advances such as blockchain, Artificial Intelligence (AI), and the Internet of Things (IoT) are expected to have on future requirements for expertise and the jobs that make up the public sector workforce.

Literature Review

The aim of this review is to discover the common patterns in digital literacy and 21st-century skills/competencies in the publications considered as benchmarks in digital literacy or in high impact factor empirical study results of digital literacy. There is no globally accepted definition of digital literacy. However, most of the scholars have stated that digital literacy does not simply refer to the ability to use computers and software. The term digital literacy is also referred to the cognitive competencies, which include the ability to select, access, organize, critically evaluate, produce, communicate, and share information in different digital environments. These skills should be complemented by meta-cognitive competencies, such as critical and systemic thinking, problem-solving, and decision making. In this sense, digital literacy emerges as a multidimensional concept. (Radovanović et al.2020)(Morgan et al.2022)

In addition, according to the report prepared by the European Commission on digital skills, the definitions of the most used terms in digital education have been listed as follows: Functional digital skills refer to the use of online technologies, as little more than a tool, to access, manage, integrate, and evaluate information, create and communicate knowledge. Dispositional or attitudinal digital skills involve attitudes, motivation, confidence to use digital tools for knowledge creation, problem-solving, formulation, and implementation of ideas and acquaintance with concepts related to digital literacy, new-media literacy, informational literacy, computer literacy, and information systems in their work. The term ICT skills generally refers to a broader range of competences that includes the ability to critically evaluate and apply digital media for networking, privacy, and Internet security. According to Borowicz and Czerwonka, digital skills refer to the knowledge and the set of personal behaviors to manage technological artifacts, to communicate in digital environments, and to manage the information and knowledge that digital environments make available and implement these competences using technological artifacts and communication technologies in everyday activities. (Van et al.2020)(Seufert et al., 2021)(Bravo et al.2021)

Global Best Practices in Empowering Public Services to Attract Talent

Comparison and analysis of leading global practices of countries in the world are such an important area, which is extremely significant and effective for socio-economic and public management processes. This is connected, first of all, with the fact that in developing world societies, in many aspects, there is no need to make a pioneering search. It is a waste of time and not effective from a viewpoint of expending resources. There is an opportunity to use already available world's "best practice or experience", equivalent to international standards. Transition to innovative type public management of the economy is impossible without the active use of the "benchmarking" process that allows understanding their level of development continuously, independently, whether we are discussing economic unity, the region, separate municipality, or a concern enterprise. Furthermore, the connection to international and national standards should determine the formation of processes, management handlings, that are engaged in social development and welfare. (Vogel et al.2021)(Oreggioni et al.2021)(Meseguer-Sánchez et al.2020)

The main subjects that affect the choice of activities by individuals are public services, which are mainly financed from the state budget and local self-government, performing authorities. The public services sub-sector generates a significant proportion of the Lithuanian economy. This sector is responsible for political and social priorities, mortgage in Lithuanian Vilnius, situation in health, quality, and accessibility of education. It ensures comfort and safety in populated areas, basic livelihood services are rendered, and families instill qualitative apartments. Therefore, the qualification, compensation, and attractiveness of the civil service staff, by means of the state, may be significant for the success of certain economic activities in realization. Although organizations analyze the importance of human resources in achieving their goals widely and deeply, the role of employees in achieving a unique task which underlies the existence of public sector organizations is evaluated insecurely in the public sector. The impact of the qualification level of the organization's staff, their competitiveness, and effectiveness of the organization on the economic and social results is discussed, but it is not measured systematically, and the synergy of childbirth is not accumulated.

Role of Advanced Technologies and Artificial Intelligence in Talent Attraction

Technological advancement has greatly stimulated such concepts as remote service provision, teleworking, and flexible working hours. No longer do employees feel necessary to work in the public service tradition. These sorts of conveniences may now be achieved just as easily in the public sector as in the private. Advanced electronic libraries reduce the need for civil servants to be posted in hard-to-fill locations – rarely considered to be a career-

booster in any event. Websites, email and electronic file transfer capabilities remove the need for government staff to be physically present in the office. Video and teleconferencing are gaining credibility as substitutes for attending various necessary, but not need-to-attend, meetings across the country. Proprietary enterprise-wide software and computer-based systems continue to reduce the need for manual effort on routine tasks. These technological advances and others foster conditions which are increasingly attractive to high-quality applicants and to current employees aware of new opportunities around them.

Artificial intelligence and advanced technologies greatly facilitate work. In particular, the process of researching and accessing necessary facts, retrieving the actual filed facts and then electronically connecting those facts in appropriate ways is much easier by using today's information technology than by the traditional reading, travel, or one-on-one meeting approaches. Research for a current list of search capabilities using artificial intelligence will provide myriad examples. Among them, possibly the best known is making it possible for a current question to be phrased in terms of retrieval from enterprise databases whose files contain years of accumulated, typically unrelated written findings. With a little planning beforehand, research costs (time and money for travel, records-search) through use of search electronics are relatively lower. Thus, capitalizing on these technological advances results in a greater return for cost (research time, expenditure of funds). There can be significant leverage in these reduced costs. Many government agencies spend portions of their budgets on searching information. Climbing up the 'easily satisfied needs' hierarchy is quite possible for public sector employees now that they have more time to also address interesting and challenging assignments. (Valle-Cruz et al.2020)(Taeihagh, 2021)(Borges et al.2021)

Methodology

The design of the research will be based on an exploratory case study approach to explore the comparative results of the ministries in the United Arab Emirates with the global best practices carried out by ministries globally. The research will have two case studies, including eight ministries in the United Arab Emirates. The first one will be carried out within the pilot study, including four ministries, while the other one will be carried out in the full study, including another four ministries. The purpose of this paper is to lay the foundation for best practices of attracting, retaining, and developing public service talent in the country. In recent years, the United Arab Emirates has become a world leader not only in economic and social development but also in digital technologies and artificial intelligence.

Governments globally are supremely mindful of the need to avoid lagging behind in the race to attract and retain talent, similar to the private sector. This race is quickly changing, and its outcome will define the well-being and prosperity of nations in the future. The UAE government has proposed the concept of government innovation and expressed a desire to have the most innovative, happy societies, and the world's leading government. The introduction of the large-scale public service reform AI strategy in 2017 demonstrated the credibility of this ambition. The transformation of the government sector and the transition to the virtual government are important landmarks. The government has developed an agenda including eleven pillars, through which public service innovation dividends will be generated.

Research Design

Qualitative content analysis of secondary data sources was conducted to ensure the trustworthiness of the study. To generate comprehensive data, particularly in the early stages of the research where little is known about the topic, examination of gray literature, including government publications and reports, conference papers, policy documents, theses, and dissertations, was deemed crucial. To that end, the most recent relevant annual reports, statistical bulletins, and white papers produced by respected government labs, observation centers, and private research labs around the world identifying and classifying global best practices in empowering public services to attract talent using advanced technologies and artificial intelligence were examined.

Using qualitative content analysis, the categories method was employed to compare global best practices while recognizing the absence of previous local or global literature about the matter in question. A reflective approach was adopted to integrate the description of the best practices into the analysis and discussion focused on categories and internal relationships. Several multidisciplinary reports and global organizations whose missions cover related or relatively related objectives to this paper were used for this purpose. Scrupulous data were gathered through these supply-side processes and methods.

Data Collection and Analysis Techniques

The purpose of the present research was to investigate global best practices that will support the UAE in effectively competing for talent by providing an intellectual human service package capable of meeting rapid socioeconomic changes in the field of public

services, in addition to ensuring the sustainability of our current and future development processes that are compatible with knowledge-based competitive economies. This was achieved using multiple techniques and strategies in collecting and analyzing data.

Multiple variations of specific qualitative research methods and procedures were utilized to collect comprehensive information on the best practices available globally. These methods involved the use of secondary research techniques for reviewing and critically evaluating current literature and documents. These included books, research reports, and market surveys, industry literature, databases, and reports associated with commercial and professional institutions, advanced organizations, government, public and private sector institutions. The key global best practices are publications in the form of books, conference proceedings, periodicals, and institutions' websites that are available widely, globally or regionally, using English, a key to access the most crucial information sources. Various and multiple data inputs allowed researchers to verify and corroborate information for both the specificity of the global best practices and the results of the data collection process. Data classification and analysis were then executed in three steps.

Empowering Public Services to Attract Talent: Case Studies

Italy has been at the forefront of advocating for and spearheading the digitization of governance. The government has taken a bold stance in actively promoting the digitization of government services, resulting in notable advancements. As a direct outcome, Italy has implemented focused initiatives to drive digitization efforts, leading to a substantial surge in public utilization of government services. The digitization of a vast production model within the government infrastructure has remarkably reduced the reliance on human resources, triggering a profound transformation in the provision of public services and the overall work environment for government employees. (Datta et al.2020)(Datta2020)(Tangi et al.2021)

Acknowledging these significant shifts, Italy has proactively devised and implemented a co-creation process that brings together the private sector and the government. This strategic partnership serves as a vital mechanism to effectively address and navigate the rapid changes taking place in the realm of public work. Consequently, the Government Innovative Management Initiative has been devised, encompassing critical support mechanisms and active participation from esteemed university professors. This comprehensive framework plays a pivotal role in orchestrating and facilitating the ongoing digitization process, ensuring its success and seamless management.

The delivery of public services is one of the most renowned nationally and internationally for its efficiency and effectiveness. The public service reform process has lasted for almost twenty years and has been based on innovation and digitization of their service improvements. Its implications have attracted a large part of the Portuguese statistical glow. The government offers services based on the demand curve, image quality, and the direct needs of both citizens and corporate customers. An online census portal allows taxpayers to file tax returns quickly and securely, while informing the Housing Service (LoRaS) application provides immediate data about properties in use. At the service provision level, on the assisted voluntary service model, LoRaS, the self-service model increased significantly reduced the intervention of government officials in favor of the eventual satisfaction of both parties, the public service of Portugal. (Crato2020)

The United Arab Emirates: Talent Attraction Initiatives

Dubai Government Human Resources Department (DGHR) introduced the Talent 2033 project called Future Proofing Dubai's Workforce in the presence of representatives from federal authorities, government bodies in Dubai, and key employers in the private sector. These organizations operate in various sectors such as travel, logistics, tourism, information and communications technology, real estate, wholesale and retail trade, finance, insurance, healthcare, education, and manufacturing. The main goal of the project is to make Dubai a global and competitive hub that empowers talent and plans strategically for the workforce in both the government and private sectors. The project aims to integrate 65,000 Emiratis into the private sector, digitize labor market forecasts, enhance productivity, and implement automation through advanced analytics engines.

Additionally, the project will focus on creating comprehensive and tailored programs to build the capacity of the future workforce, equipping them with the necessary skills and knowledge to excel in an ever-changing global landscape. This 12-month project will be structured into four main phases, each addressing different aspects of talent development and workforce planning. Upon completion, the project will continue with a series of specific initiatives and programs aimed at sustaining its long-term impact and ensuring the continuous growth and adaptability of Dubai's workforce.

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Abdullah Ali Bin Zayed Al Falasi, Director General of DGHR, stressed the paramount importance of collaborative efforts with stakeholders, harnessing the abilities and potential of talents, and aligning with Dubai's strategic vision for 2033. Furthermore, the project was initiated to proactively envision the future of Dubai's workforce in response to the transformative changes in the job market, embracing technological advancements, and deepening the understanding of emerging job market trends and the essential skills required for current and future human capital.

This visionary initiative strives to effectively realize the strategic vision set forth by Vice-President Sheikh Mohammed bin Rashid Al Maktoum by positioning Dubai as a thriving global hub for innovation, creativity, and human capital developments. Through the Talent 2033 project, DGHR is committed to not only addressing the evolving needs of the human workforce in Dubai but also providing comprehensive solutions and cutting-edge tools that empower both national and international talents. Moreover, the project aims to foster a culture of collaboration between the government and private sectors, facilitating sustainable development and enhancing the overall well-being of the community through the utilization of the collective resources and expertise. By embracing the principles of innovation, adaptability, and inclusivity, Dubai is poised to excel as a global beacon of talent and a catalyst for socioeconomic progress in the years to come.

Comparative Analysis of Global Best Practices

Absence of advanced systems and practices in recruiting and managing public sector employees might result in difficulties related to attracting and retaining good talents. To make the process of recruitment of effective employees successful, public services of the countries of the world developed a variety of advanced practices and processes based upon modern technologies and analytical methods. These methods help to forecast potential risks of keeping ineffective employees in the future. To address these goals, global experience in management of human resources in public service as well as empowering of civil servants is analyzed, in particular such countries as the United States, Singapore, South Korea, the Netherlands, the United Kingdom and New Zealand. Initially the article presents a comparative analysis of structures, operating functional responsibilities and recruitment methods used in public services of the developed countries. About 55 companies providing HR services are internationally popular because of the hits on their website and great variety of other contacts.

The focus of the developed systems is to attract and retain young talents making public service sector more attractive for graduates of the best universities and young professional efficiently solving these tasks. The civil servants focus on these tasks in the context of rising salary rates in the private sector, especially in high-developed countries, as well as an increasing competition for attracting skilled and talented professionals. The modern practice of public services aims to improve the quality of management through application of the best practices of personnel management in public office, mitigation of political cycle influences on the process of civil servants personnel management in the implementation of long-term goals and strategic objectives for public administration and development of legislative support of a coherent approach to human resources management, taking into account the long-term policy objectives in the field of public service reform. The UAE government is paying special attention to improvement of the quality and reliability of the work of public services. Currently, for this purpose a lot of new innovative technologies are used. The action plan also involves the large use in the public labor market of the best advanced practices, the standards of returns on human resources of the private sector and modern technologies.

The use of advanced techniques based upon modern software makes it possible to reveal the professional and personal preferences of the candidates qualitatively assessed the potential corporate atmosphere, accounting of the existing potential of employees, or to increase productivity, business effectiveness, and, accordingly, to determine the dynamics of the development and related individual measures of social development of employees. Consequently, the policy of admission to public services is to be an essential condition for the professional occupational safety of the economy. The recruitment system of employees must be focused not on the reduction of the number of employed workers, but to address the problem of young specialists adaptation to long-term goals of public service, the motivation to improve the quality and efficiency of their work as well as to create the basis for mutual understanding and trust between employees and employers. The article discusses a number of recommendations, including the use of advanced technologies and innovative methods in order to improve the performance of public services and the government, detailed consideration of the career management and the scope of decision-making, behavior, and requirements imposed on the professional and personal qualities of public servants.

Role of Advanced Technologies and AI in Talent Attraction: Case Studies

London examines the use of AI and big data in governments to implementing efficient personnel strategies, turning to the cases of the United States, the United Kingdom, and Singapore. Advanced technologies and artificial intelligence also play key roles in attracting and empowering talent in digital governments and managing workforce performance. Digital governments use advanced technologies in the management and performance of their employees to reduce the human resources procedures as much as possible. The U.S. administration has put great emphasis on automating human resources procedures by using advanced technologies and artificial intelligence. It has been stipulated to reduce Applicant Tracking and Onboarding times and to largely minimize human interaction. Artificial intelligence can change employee performance evaluation given its potential to provide managers insight—through both quantitative and qualitative data—into employee work activities and performance. (Regmi, 2023)

The Singapore Government has given importance to the role of big data in analytics tool as a part of its digital management. Analysis of employee feedback and contribution to the service not only help in identifying high performers but could help in the promotion and development plans of those high performers. The literature suggests that neural networks and deep learning are particularly relevant to evaluate employee performance. Since it is a self-learning, it can be used to provide an understanding of the employees' emotional content, tone of voice, and stress levels which is important in assessing the satisfaction or the customer-service skills of employees performing tasks such as customer support or sales. It is transforming the talent acquisition process and workforce management to determining employee behavior and organizational congruence, including how to yield the best performance. With the ability to grab information from all sorts of sources quickly, computers can help assess the job readiness of different candidates in a fraction of human resources specialists' time. As one of the most popular technologies of our days, blockchain technology is seen as a solution for storing and managing various database records including human capital data within the public sector.

Challenges and Opportunities in Implementing Advanced Technologies and AI in Talent Attraction

Since the government of the United Arab Emirates has adopted global best practices in corporate services, it has made the public sector more competitive and efficient in attracting, managing, motivating, and retaining talent. This has also enhanced the creativity and innovation of current and future generations of government workers. The strategic use of big and small data, as well as AI technologies, can further support these initiatives. It can make the public sector more capable of attracting and exciting employees, allowing them to achieve a broader impact.

The external job market constantly changes, and administrative capitals, policies, procedures, techniques, and rewards must follow these changes and be dynamic.

The workforce of the UAE government is very young, and young people are impatient and have a strong desire for status, compensation, and rapid career development. In the public sector, it is important to design attractive work to retain and attract highly talented young people conveniently. The need to implement new and progressive human resource management practices is not only a matter of negotiation. It is the design of research protocols that provide answers to the governments and human resource professionals of the public sector. This will give continuous reports to tell the story of innovation. Only in this way will people fulfill their organizational responsibilities and contribute to the advancement of their government and their country during their public life. They will also maintain the incentives they need to fulfill their organizational commitments.

Findings

The findings of this study are based on the implementation of the composed "Global Best Practices" model into practice, analyzing the specific components of the model, and comparing them with approaches of some of the best employers in the private sector. It was concluded that digital technologies significantly impact working arrangements, a client-centric approach, workload, execution time, and effectiveness of public service delivery. The paper found that risks and challenges connected with these changes are at the focus of experts' attention. The real challenge is bearing in mind that performance effectiveness and workforce reduction and welfare retention and satisfaction of employees contradict one another.

The number one priority in implementation of the composed "Global Best Practices" model in the executive government authority is implementation of radical innovations based on advanced technologies and artificial intelligence. The study contains a list of the offered innovations with special consideration of their influence on outcomes. A zone of social corporate responsibility is represented, where a public servant could be both a provider and a consumer of services in the zone. The shadow or opposite side of global best practices, "drives," and stimuli is defined as human "vices" and "punishment." The paper also discusses how the current personnel policy and artificial intelligence-based personnel policy correspond with the findings of the offered study.

Conclusion

This comparative analysis of global best practices in empowering public services to attract talent highlighted several challenges facing public services and economies at large. The information-gathering process involved a careful study and analysis of workforce national strategic plans of different countries by examining international approaches to government excellence in workforce management in comparison with the UAE practices and recommendations over the workforce national strategy. The study demonstrates the general global competitive environment in the area and the USA strategic interest to achieve and sustain global leadership in attracting talents. Moreover, considering the USA history and its ranking at this crucial moment, the strategic United States experience ranks first as a comprehensive in-depth study at the macro level.

It is concluded that the global best practices in empowering public services to attract and retain talent identified in Japan, Singapore, and Estonia have the relevant and sufficient degree of macro and micro-level depth while achieving the strategic objective of the UAE. Additionally, the other best practices in the remaining countries of strategic interest to the UAE, in comparison, only have the general degree of macro-level depth and strategic relevance and correlation at the UAE level. However, it becomes increasingly important to continually reinforce awareness and interest in the emulation and assimilation according to the chemical formula (inspiration + innovation x emulational results = effective engine/acceleration) to achieve the critical mass of competences and the final strategic expectations and benefits.

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