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Critical Artificial Intelligence Readiness Factors in Context of Public Sector Organizations: An Expert Opinion Survey

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Abstract

Public sector organizations are adopting artificial intelligence (AI) to meet the challenges of the fourth industrial revolution. The successful implementation of AI is a challenging task, and past research has advocated the need to explore key readiness before AI implementation. This research aims to identify the AI readiness factors that various experts from industries and public sector organizations have explored. The systematic literature review conducted (Ali and Khan, 2024) identified twenty-three AI readiness factors. These factors were validated through experts of the industry. For this purpose interviews of experts were conducted and transcribed. The expert evaluated all twenty-three factors and finally categorize them in five major themes. The main factors identified for AI readiness were related to people readiness, process readiness, technology readiness, strategies and policies and organizational environment. The findings of this research indicate that AI readiness factors are of high importance for the implementation of AI in organizations. All of these factors identified through this research should be considered before implementing AI in any public sector organizations. For this purpose, top management should develop suitable strategy by incorporating these factors in the organization.

Key words: Artificial Intelligence, Readiness Factors, Public Sector, Expert Opinion.

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1. Introduction

In the study background, a lot of different words have been used to describe artificial intelligence, the concepts mentioned include intelligent agents, intelligent behavior, intelligent systems, machine intelligence, machine learning and algorithms. Previously, artificial intelligence (AI) was envisioned of as machines that could mimic human intelligence in terms of both thought and decision making (Frantz, 2003). Artificial Intelligence is a technological advancement with profound effects on economic, social, and political spheres. Artificial Intelligence allows computer systems to learn from their experiences, adapt to new inputs, and automate tasks usually done by humans such as analyzing visual information and making decisions. Artificial Intelligence is one of the best and emerging technologies in current era. Public and private sector organization need to implement this technology to meet the challenges of 4th industrial revolution. The implementation of such initiatives is a challenging task and according to there is a high failure rate for such initiatives (Fatima et al., 2022).

AI is widely recognized as a crucial catalyst for the fourth industrial revolution which is characterized by the advancement in technology that harnesses the power of digital, physical, and biological systems. Organizations will benefit from AI-powered transformation. Artificial intelligence (AI) has the potential to enhance profitability by an average of 38 percent across 16 different industries across 12 economies by 2035, resulting in an economic boost of $14 trillion (Ekellem, 2023). As AI is expected to contribute 15 trillion USD to the global ecotours by 2030, many company leaders are excited and afraid about it (Yerlikaya & Erzurumlu, 2021). In the Middle East, artificial intelligence will have an effect by 2030. It is expected that AI will have an effect on the ecotour worth US$320 billion, or 11% of GDP (Jain, 2018; Rao, 2016). There will be a substantial impact on the ecotour and the specifically in the areas of financial services, manufacturing industries, supply chain industries, healthcare, and information and communication technology sectors as a result of artificial intelligence (Abdou & Kamal, 2018). AI will transform many aspects of human life, just like the steam engine or electricity technology did in the past (Quan and Sanderson, 2018; Hariguna et al., 2024; Hafeez et al., 2023; Khan et al., 2023; Ali et al., 2024). The organizations ignored readiness aspect and initiated implementation faced lot of problems and ultimately resulted in failure (Nili et al., 2022; Sair et al., 2023).

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Researchers also emphasized the necessity of determining whether such efforts have the necessary ingredients before being put into action. It is necessary to investigate the readiness aspects in the context of developing nations. Senior management in both public and commercial sector enterprises finds it difficult to successfully adopt AI. Failure occurred when AI was implemented without considering readiness factors (Jöhnk, 2021). Currently, there is a dearth of research on organizations' preparedness for AI. Few studies have examined the organizational aspects of AI deployment, including the integration of technology into organizational processes (Ransbotham et al., 2020). Previous research on the phenomenon, which makes use of the TOE framework (which stands for technological, organizational, and environmental), has shed light on the factors that influence the readiness of artificial intelligence (Alsheibani et al., 2019; Pumplun et al., 2019; Jöhnk et al., 2021). This research essential to evaluate the readiness of organizations in relation to the context. Currently, there are only a few articles that address the suitability of healthcare organizations for AI readiness (Alami et al., 2021). However, there is a need of research regarding AI readiness factors in the context of public sector organizations. This research will address this gap by validating the AI readiness factors explored by (Ali & Khan, 2024) through experts in the context of public sector organizations.

2. Literature Review

The AI readiness aids in appraising and characterizing an organization's AI capabilities. It is intended to assist in the identification of cultural aspects related to AI adoption and to support the resolution of significant barriers (Neumann et al., 2024). Organizational readiness refers to the capacity of an organization to smoothly and sustainably undertake a transition (Leite et al., 2023). The state of having the necessary conditions and resources to facilitate a seamless and ongoing implementation of artificial intelligence is known as organizational readiness. Organizational preparedness refers to the extent to which an organization possesses a clear vision, a well-defined purpose for the intended transformation, and the necessary motivation and behavior to effectively adapt to the change. Organizational preparedness refers to the extent to which the organization's structure and management practices affect its capacity to effectively implement AI transformation (Kruse et al., 2019; Khan et al., 2024). The readiness to study is determined by assessing the knowledge and abilities needed for new cognitive activity tasks (Williams, 2019;

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Rafferty et al., 2013). Although the concept of readiness has been around for a while, due to its complexity and nature, there is no consensus on what constitutes change readiness (Rusly et al., 2012; Wright, 2022; Ali et al., 2024). Although there are other definitions of change readiness (Rafferty et al., 2013), a typical definition is that it refers to "individuals' beliefs, attitudes, and intentions on the necessity of changes and the ability of the organization to successfully implement those changes (Khan et al., 2024). In recent literature reviews, organizational readiness for change is conceptualized in either an organizational or an individual perspective change (Adam & Hanafi, 2022; Weiner et al., 2008). The organizational change as a new process of moving to different and implies the movement of any process change, organization structure change, product change, or anything that affects the organization to operate differently or move to a new process change, be considered as organizational change. There are different types of readiness in the organizations: physical change of readiness, emotional change of readiness, experimental change of readiness, and knowledge change of readiness. The theory of organizational readiness change**,** resources availability, task demands, capabilities, and situational factors. Organization readiness has identified four elements that influence readiness for change, which are change content and context, internal process context, and the individuals involved (Weiner, 2009).

The concept of readiness for change has garnered increasing attention compared to the concept of resistance to change. They argue that readiness for change greatly predefines the individual resistance to support for a change effort. These days, a significant portion of the literature on readiness for change addresses not only individuals but also the organization, discussing readiness for change as a phenomenon at the organizational level. Artificial intelligence is a promising and highly effective technology that can help businesses gain a competitive advantage. Artificial intelligence is rapidly affecting the global sectors (Najdawi, 2020). The majority of public organizations are preparing for AI implementation, and many public sector organizations are moving forward with it. Readiness is used to reduce the failure rate of AI implementation and faces different types of challenges during their adoption of AI processes (Issa et al., 2022; Williams, 2019; Rafferty et al., 2013; Oliveira & Martins, 2011; Aboelmaged, 2014; Lokuge et al., 2018). AI organizational readiness is quite an emerging research field, relevant literature is limited. Existing readiness factors are mainly extracted from three articles (Alsheibani et al.,

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2018; Pumplun et al., 2019; Jöhnk et al., 2021) and one article in AI readiness in healthcare (Alami et al., 2020). The literature also takes this into consideration (Alsheibani et al., 2018; Pumplun et al., 2019) both mention "relative advantage" that refers to the need of using AI compared to other technologies. They both mention "compatibility" which refers to "the fit between the desired application and technology". According to (Alsheibani et al., 2018) propose "Compatibility between the AI business case and an organization's existing strategies positively influences AI readiness" and (Pumplun et al., 2019) propose "Compatibility between AI technology and business processes as well as the development of a dedicated business case" positively influence AI readiness in companies. Similarly, (Jöhnk et al., 2021) propose "AI-business potentials" which means the use of AI in an organization should be beneficial and suitable. What's more, (Alami et al., 2020) propose "needs and added value assessment" to avoid the negative effects AI may bring to the organization. One thing that shares in common here is that AI should be deployed with a clear business case (the need to use AI and associated business value) in mind beforehand (Alsheibani et al., 2018). Regarding environmental readiness, (Alsheibani et al., 2018) propose "competitive pressure" and "government regulations" are positive factors on AI organizational readiness. The ability of an organization to adapt to change and the creation of a theory explaining its causes and effects. Organizational readiness for change is determined by the extent to which all members appreciate the change and positively evaluate the three key drivers of implementation capability, namely task needs, resource availability, and situational factors considerations. All of these factors are required for organizations to change their implementation capability. Further measurement development and accurate sampling choices would be needed to test the notion (Weiner, 2009).

Table 1: Organizations AI-readiness factors

Rating	Factors	Organizations AI-Readiness Factors	References
R#1	Organization IT Infrastructure	Organizational readiness necessitates the availability of IT infrastructure for AI related initiatives.	Aboelmaged, 2014; Alsheibani et al., 2019; Alami et al., 2021; Gabutti et al., 2023; Hradecky et al., 2022; Infante et al., 2021; Jöhnk et al., 2021; Kumar et al., 2023; Lokuge et al., 2019; Uren and Edwards, 2023;

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R#2	Top Management Support	The organization needs a strong strategy and support from top management for artificial intelligence implementation.	Alsheibani et al., 2018; Alsheibani et al., 2019; Hradecky et al., 2022; Ithnin, 2016; Infante et al., 2021; Jöhnk et al., 2021; Kruse et al., 2019; Kumar et al., 2023
R#3	Availability of Resources	The implementation of AI necessitates the presence of both internal and external organizational resources, including technical and human factors.	Alsheibani et al., 2018; Alami et al., 2021; Dwivedi et al., 2021; Hradecky et al., 2022; Kruse et al., 2019; Kumar et al., 2023; Lokuge et al., 2019; Pumplun et al., 2019
R#4	Collaborative Culture	Organizational preparation has facilitated the complete environment and knowledge exchange the departmental level for AI initiatives.	Abdolvand et al., 2015; Alami et al., 2021; Jöhnk et al., 2021; Kruse et al., 2019; Kumar et al., 2023; Lokuge et al., 2019; Pumplun et al., 2019
R#5	Organization Structure Size	Organizational structure size has a strong ability to adapt artificial intelligence technology.	Aboelmaged, 2014; Alsheibani et al., 2018; Hofmann et al., 2020; Hradecky et al., 2022; Infante et al., 2021; Kumar et al., 2023; Pumplun et al., 2019
R#6	Organization Capabilities	Organizations have the capacity to drive innovation for AI adoption.	Alsheibani et al., 2019; Alami et al., 2021; Davenport, 2018; Hummer et al., 2019; Hofmann et al., 2020; Intel, 2018; Issa et al., 2022; Pumplun et al., 2019
R#7	Data Quality	Organizations require high quality of data for Artificial Intelligence implementation.	Hradecky et al., 2022; Iansiti et al., 2020; Jöhnk et al., 2021; Kruse et al., 2019; Montoya et al., 2019; Neumann et al., 2023; Song, 2021; Shahadat et al., 2023
R#8	Compatibility	Organizations compatibility encompasses the capacity to deliver value and provide a satisfactory experience while effectively meeting the requirements of anticipated AI developments, thus necessitating the implementation of appropriate solutions.	Alsheibani et al., 2018; Alsheibani et al., 2019; Chui, 2017; Hofmann et al., 2020; Ithnin, 2016; Infante et al., 2021; Issa et al., 2022; Pumplun et al., 2019
R#9	Financial Budget	An organization must develop a strategy roadmap for its financial budget to implement AI and address internal system difficulties.	Alsheibani et al., 2018; Alsheibani et al., 2019; Hummer et al., 2019; Hradecky et al., 2022; Jöhnk et al., 2021; Pumplun et al., 2019

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R#10	AI-Business Potentials	Organization must be flexible and AI functions business potentials demand.	Borges et al., 2021; Davenport, 2018; Hofmann et al., 2020; Jöhnk et al., 2021; Pumplun et al., 2019; Shahrasbi et al., 2014; Uren and Edwards, 2023
R#11	AI-Process Fit	Artificial Intelligence AI adoption in which organizations require process readiness.	Borges et al., 2021; Davenport, 2018; Hofmann et al., 2020; Jöhnk et al., 2021; Kumar et al., 2023; Shahadat et al., 2023; Uren and Edwards, 2023
R#12	Data Governance	The organization must have data management controls (consistency, accuracy, and completeness) for AI implementation.	Agrawal et al., 2018a; Ejasik-swoboda et al., 2019b; Hofmann et al., 2020; Hradecky et al., 2022; Johan, 2018; Jöhnk et al., 2021; Kruse et al., 2019
R#13	Competitive pressure	The influence of competition is a generally recognized factor in the uptake of technology. The push to adopt new technology is frequently exerted by corporate partners.	Aboelmaged, 2014; Alsheibani et al., 2018; Borges et al., 2021; et al., 2019; Kumar et al., 2023; Pumplun et al., 2019
R#14	Relative Advantage	The relative advantage refers to the act of understanding and acknowledging the specific benefits that an organization possesses, and being ready to actively use these advantages in a competitive or ever-changing setting.	Alsheibani et al., 2018; Issa et al., 2022; Kumar et al., 2023; Pumplun et al., 2019
R#15	Vision and Strategy	In a strategic roadmap, there are specific attainable goals and targets related to processes on how ready an organization is to adopt artificial intelligence.	Abdolvand et al., 2015; Antony et al., 2021; Davenport, 2018; Hradecky et al., 2022; Lokuge et al., 2019; Nortje and Grobbelaar, 2020;
R#16	Data-driven decision-making	Data-driven decision-making not only leads to performance improvements in businesses but also enhances AI readiness as it serves as the foundational practice for AI-driven decision making.	Borges et al., 2021; Ejasik-swoboda et al., 2019a; Jöhnk et al., 2021; Mahroof et al., 2019;
R#17	Upskilling	Organization's awareness that employees can easily understand how to prepare for AI.	Alsheibani et al., 2019; Davenport, 2018; Jöhnk et al., 2021; Kruse et al., 2019
R#18	Data Accessibility	Organizational readiness provides easy data accessibility for AI specialists to create new	Catalyst, 2020; Hradecky et al., 2022; Intel, 2018; Jöhnk et al., 2021; Pumplun et al., 2019; Shahadat

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		prototypes and develop AI solutions.	et al., 2023
R#19	Government Regulatory Issues	Organizational requirements for government policy have been identified as factors that influence AI.	Aboelmaged, 2014; Alsheibani et al., 2018; Kruse et al., 2019; Kumar et al., 2023; Pumplun et al., 2019; Shahadat et al., 2023
R#20	Data Availability	Organizations require data availability within internal systems for AI readiness solutions.	Agrawal et al., 2018; Catalyst and Fund, 2020; Eljasik-Swoboda et al., 2019a; Kruse et al., 2019
R#21	AI Awareness	Organization readiness for AI awareness such that employees easily understand AI.	Agrawal et al., 2018b; Hofmann et al., 2020; Jöhnk et al., 2021
R#22	Innovativeness	Organizational readiness must improve employees' commitment to change and AI adoption.	Hofmann et al., 2020; Jöhnk et al., 2021; Kruse et al., 2019; Neumann et al., 2023; Pumplun et al., 2019
R#23	AI Policy	From the government's AI initiative, organizational readiness requires an AI-Policy.	Borges et al., 2021; Dwivedi et al., 2021; Kumar et al., 2023

In Table 1, various systematic literature reviews were conducted by Ali & Khan (2024), ranking the organization readiness factors for artificial intelligence. The AI readiness factors were evaluated through expert analysis, and they suggested five major factors and added some subconstruct themes into the major factors.

3. Methodology

This study employs a qualitative approach to address the research questions outlined in the introduction, requiring a variety of research strategies. Therefore, for the current study conducted an adequate number of formal and informal interviews with top, middle, and lower management, as well as the head, CEO, IT/operational organization, AI center research engineers, professionals' network, technical specialists, data governance specialists, project planning managers, and team members. Methods are the specific tools and procedures you use to collect and analyze data, such as in-depth interviews, documents, reports, organizational drafts, and various articles, which are used to develop the nodes in NVIVO for analysis. Purposive sampling is a non-probability sampling technique that is most commonly utilized when a researcher needs to understand the participant viewpoint. So, this research chose a group of individuals who are directly involved in the exploring the organizational readiness factors for artificial intelligence.

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3.1 Selection of Experts

In order to validate the AI readiness factors explored through systematic literature review by (Ali and khan, 2024) following experts were selected.

Table 2. Expert opinion interviews

ID	Organization	Designation & Experience	Interview Duration
E1	National Centre of artificial intelligence	Head, NCAI, 15+ years' experience	35 Minutes
E2	National Centre of artificial intelligence	Software engineer 5+ years' experience	27 Minutes
E3	Blue AI Technologies	CEO, BAIT, 15+ years' experience	32 Minutes
E4	Quid-e-Azam University Islamabad	Head IT Center of Excellence, Associate Professor, artificial intelligence, 10+ years' experience	28 Minutes
E5	Ministry of industries & Production	Planning Director, 20+ years' experience	52 Minutes
E6	Centre of excellence & artificial Intelligence Islamabad	Professor, artificial intelligence, 15+ years' experience	28 Minutes
E7	Centre of excellence & artificial Intelligence Islamabad	Associate Professor, AI, ML, Cloud Computing 12+ years' experience	32 Minutes
E8	Centre of excellence & artificial Intelligence Islamabad	Senior Technical Program manager, 12+ years' experience	26 Minutes
E9	Comsat University, Islamabad	Associate Professor, computer Science, AI, 15+ years' experience	34 Minutes
E10	Comsat University, Islamabad	Associate Professor, IT, AI, 15+ years' experience	18 Minutes
E11	Pakistan Telecommunication, Data center.	Director data analyst, 20+ years' experience	39 Minutes
E12	National University of science & Technology (NUST).	Associate Professor, IT, AI, 15+ years' experience	47 Minutes
E13	Sino Pak for artificial Intelligence research Center	Associate professor, 15+ years' experience	38 Minutes
E14	Sino Pak for artificial Intelligence research Center	Head of Center of artificial intelligence, 10+ years' experience	41 Minutes

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3.2 Experts interview process

This research conducted interviews with various experts from both the industry and academia to identify novel metrics for assessing organizational readiness. The interviewed experts from academia who have made significant contributions to artificial intelligence publications, working, and industry specialists possess extensive experience in transitioning organizations from manual to digital systems.

4. Results

The research component focuses on examining AI readiness using a combination of literature factors within the context of public sector organizations. According to (Ali and Khan, 2024) influencing AI readiness factors, a systematic literature review identified the past factors for AI readiness, which factors are organization IT infrastructure is the most significant factor in its AI readiness. Furthermore, top management support, resource availability, collaborative culture, organizational size, organizational capabilities, data quality, compatibility, financial budget, AI-business potential, AI-process fit, data governance, data accessibility, data governance, competitive pressure, relative advantage, strategic vision, data-driven decision making, upskilling, data accessibility, government regulatory issues, data availability, AI awareness, innovativeness, and AI policies are important. Essentially, our focus is on examining the factors that contribute to AI readiness for future planning, leading us to discuss the state of AI readiness in public organizations. During the research phase, this research identified the most crucial readiness factors for artificial intelligence implementation in various public organizations. Experts from diverse industries have identified multiple factors and sub-factors for AI readiness within public sector organizations, concluding in the development of five primary factors and their corresponding sub-factors.

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Figure No. 1: *Organization Readiness World Cloud*

4.2 Major key readiness factors for artificial intelligence

Experts have suggested and recommended the major five factors related to AI readiness reflected and identified the following key readiness factors through experts reflected in the Fig 2.

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Figure No. 2: *AI-Readiness factors*

Consequently, determined five crucial readiness factors that can foster successful AI implementation in the context of public sector organizations: this study identified the following five key readiness factors: (i) People readiness; (ii) Strategy and policies; (iii) Process readiness; (iv) Technology readiness; and (v) Organizational environmental readiness and develop a formative construct of organizational readiness for artificial intelligence, using these factors as sub-constructs.

4.2.1 People readiness

In developing countries, people readiness is more important, according to the experts. People's readiness is an individual's state of preparedness to accept, adopt, and effectively use new technology, process, or behavior. In public sector organizations, people have many resistances to change, so in the context of this study, expert opinion suggests that people readiness is important Whether people are ready for AI is crucial for any organization, so first assess their readiness before effectively incorporating all relevant factors like awareness & Skillset, Training Plan, and collaboration among multi-disciplinary team members and availability of desired skillsets. The important aspects regarding people readiness were reflected in the Fig 3.

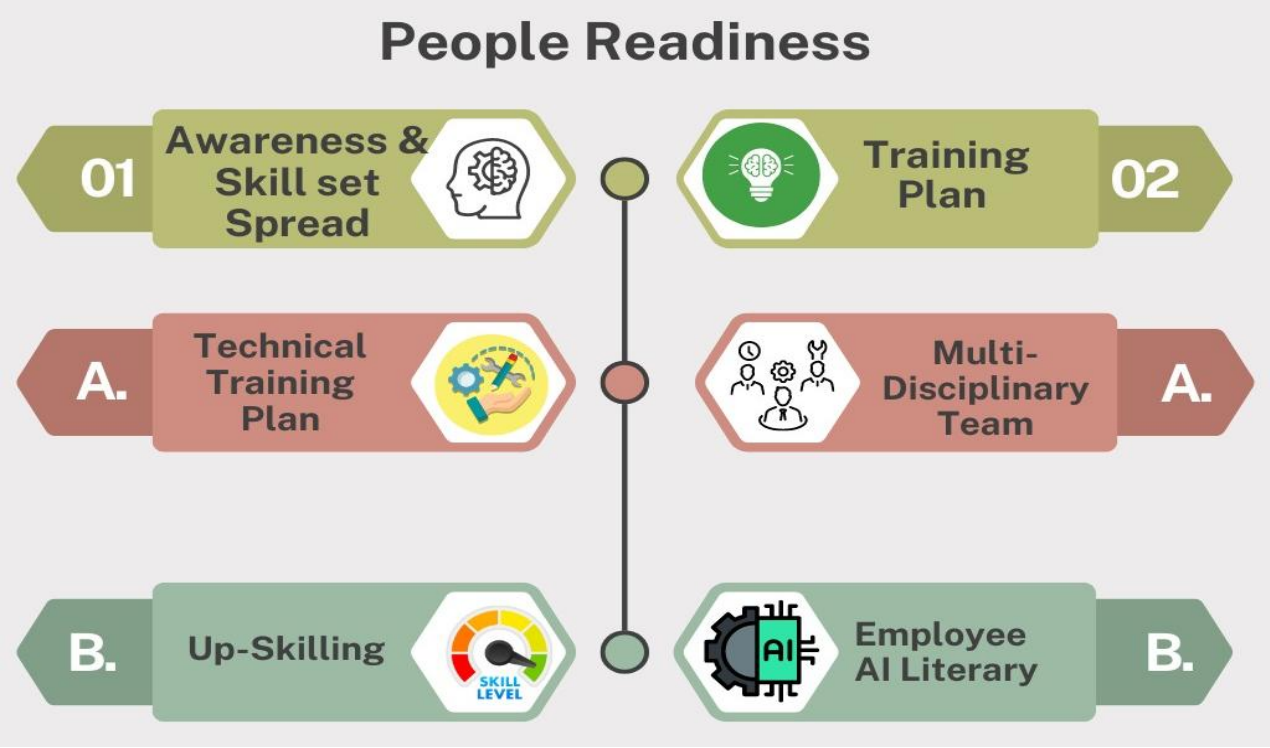

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Figure No. 3: *People readiness factors*

People's readiness is crucial in both public and private sector organizations, particularly in public ones where people often resist change and proper strategy need to be developed in this regard.

4.2.2 Strategy and Policies

Strategy and policies play a crucial role in ensuring AI readiness and organizational success. The vision and strategic goal refer to the formulation of achievable targets that specific organizations expect from artificial intelligence, along with a strategic roadmap leading towards these targets. Moreover, the absence of a strategic roadmap towards artificial intelligence implementation would prevent companies from reaping the bigger business value and sustaining a long-term competitive advantage. The important aspects were reflected in Fig 4. Leadership & Vision (Organization Vision & Strategic Goals, Top Management Support), Strategy (Organizational AI-Strategy, Transition and Change Management Strategy, Implementation Risk Mitigation Strategy, Communication Strategy), Policies & Guidelines (Organizational AI Policy, Responsible AI-Usage Guidelines (Government Regulatory Compliance and Legal Framework) are considered important in this regard.

Figure No. 4. *Strategy and polices factors*

Most experts' opinions suggest two categories for AI implementation: leadership vision, formulation of suitable strategy regarding different aspects reflected in fig 4.

4.2.3 Process Readiness

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Process readiness aspects are reflected in Fig 5.

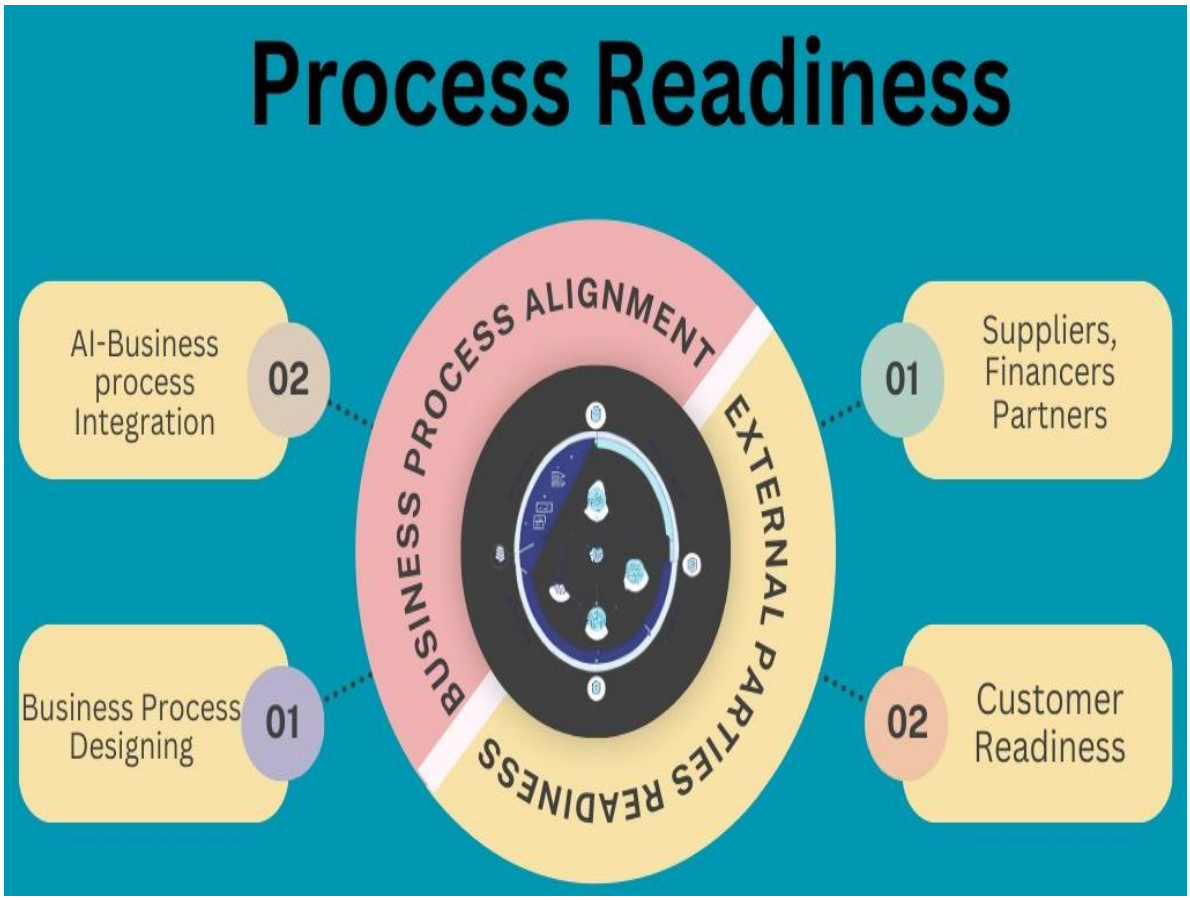

Figure No. 5: *Process readiness factors*

The redesigning of proceeses and furhter their integration with customers and suppliers need to be addressed at this stage. Process integration will play an important role in this regard. Processes are a major factor that includes business process alignment, business process design, AI-business process integration and sub-major factors of external parties' interaction readiness, partners, suppliers, financiers' readiness, customer readiness.

4.2.4 Technology Readiness

This factor reflects technology readiness as the organization's IT infrastructure (cloud, security, hardware, and software) and data governance readiness (data availability, data quality, data accessibility, and data platform). Readiness allows for consistent and uniform discussions of

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technical maturity across different types of technology, such as data governance and organizational IT infrastructure. Fig 5 reflects the important aspects of Technology readiness.

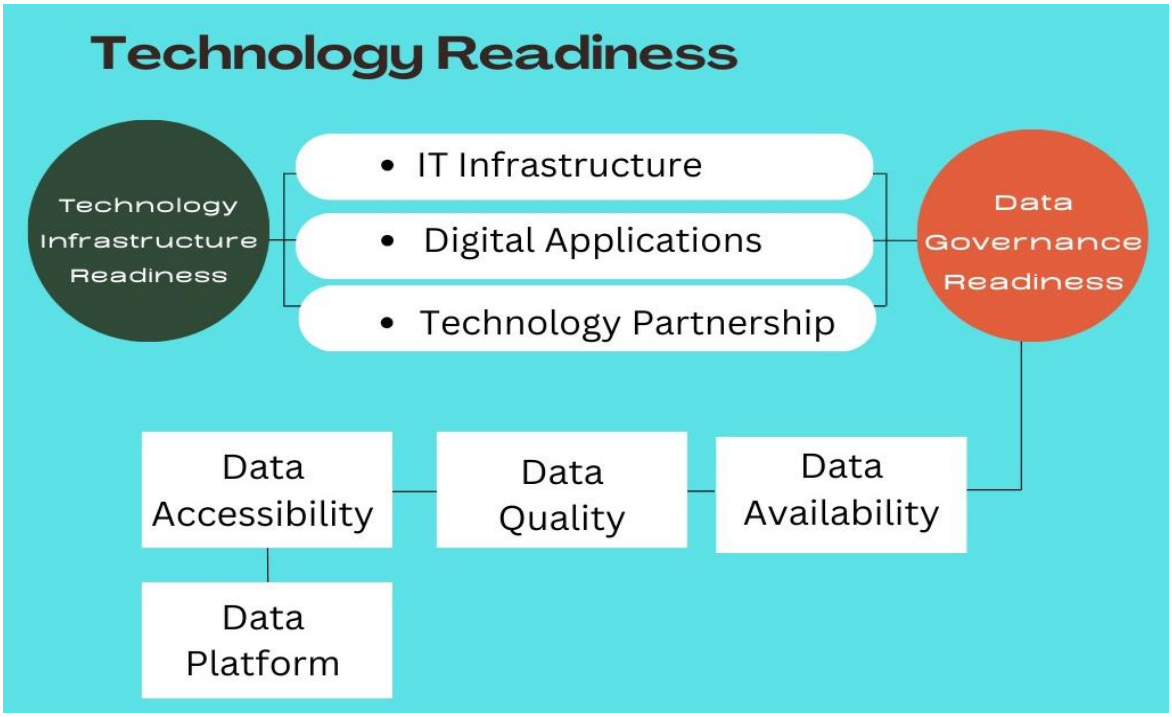

Figure No. 6: *Technology readiness factors*

In Fig. 6, technology readiness has two major categories of AI readiness factors: one is technology infrastructure readiness, and the second is data governance readiness. In experts experience, data governance encompasses a wide range of data types. Data governance encompasses a wide range of data types, including security data, data management, data operating platforms, and data policies, making it a significant area of governance. Subfactors are IT infrastructure (hardware, cloud, security, etc.), digital applications & systems, and technology partnerships. Technology Infrastructure Readiness **(**IT Infrastructure (Hardware, Cloud, Security, etc., Digital Applications & Systems**,** Technology Partnerships). Technology infrastructure encompasses both IT infrastructure and digital applications, while partnerships with various organizations collaborate on the implementation of AI. Data governance and IT infrastructure readiness underscore the significance of all these technology readiness factors. The second subfactor is data governance for AI, which emphasizes the importance of data quality, availability, accessibility, and data platforms.

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4.2.5 Organizational Environment

Organizational environment collaborative work describes the degree to which domain experts, AI specialists, and IT departments actively communicate and work together in cross-functional teams In the context of AI, collaborative work is crucial to overcome siloed work and to identify new use cases that are beneficial to the organization (Fountaine et al. 2019).

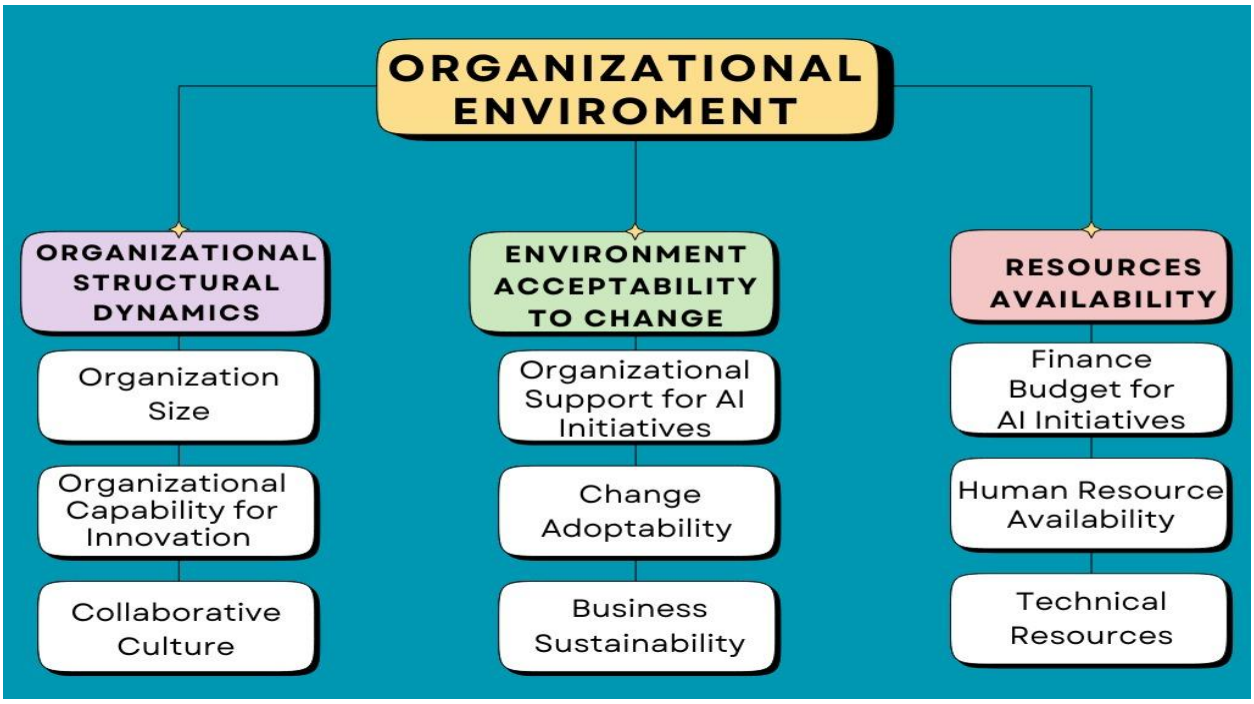

Figure No. 7: *Organizational environment factors*

In Fig. 7, organizational environments consist of three main subfactors that contribute to the readiness of public sector organizations for artificial intelligence. Non-technical individuals can utilize skill sets and technology tools due to the availability of resources. Basically, categories of resources are: resource availability, finance budget for AI initiatives, human resource availability for AI initiatives (IT and non-IT both), technical resource for solution/model development (AI specialist resources). The organizational structure factor plays a crucial role, directly influencing the organization's capability and acceptance. Additionally, the availability of technical and human resources is crucial for organizational change in the context of artificial intelligence, particularly for public sector organizations.

5. Discussion

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The findings of this research identified the five major themes in the context of AI readiness. The important considerations regarding these five major aspects are reflected in the following table 4.

Table 3: AI readiness Framework for Public Sector Organizations

MF	Factors	SF	Sub-Factors	Organizations AI Readiness Factors
1				**People Readiness**
i	**Awareness & Skillset Spread**	**(a)**	**Employee AI Literary**	AI awareness to the employees easily understanding toward AI and organization to improve the literacy rate.
		(b)	**Multi-Disciplinary Team**	Organizational readiness requires the best multi-disciplinary team or experts for implementation of Artificial Intelligence.
ii	**Training Plan**	**(a)**	**Technical Employees Training/Upskilling plan**	Organizations' readiness of the need for technical employee training can be easily understood when integrating AI.
		(b)	**Employees AI-Usage Training**	AI guidelines for employee usage training are critical to organizational readiness assessment, and technical staff can easily operate.
2				**Strategy and Policies**
i	**Leadership & Vision**	**(a)**	**Organization Vision and Strategy**	The vision and strategic plan of an organization must include realistic goals to ready for AI implementation.
		(b)	**Top Management Support**	Organization needs to successful implementation of AI, a well-defined plan and strong support from top management is crucial.
ii	**Strategy**	**(a)**	**Organizational AI-Strategy**	Effective organizational readiness is defined as a clear AI strategy that identifies areas within AI that can be implemented and add significant value.
		(b)	**Transition and Change Management**	Organizational readiness for the transition change management strategy is crucial to ensure effective management of the

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			Strategy	underlying change.
		(c)	**Implementation Risk Mitigation Strategy**	Organization readiness: Implement risk mitigation strategies to identify the risk, monitor, and evaluate the risks and consequences inherent to completing a specific AI implementation in any organizational process.
		(d)	**Communication Strategy**	Organizations have a comprehensive communication strategy available for the implementation of AI and information-specific matters.
iii	**Policies & Guidelines**	**(a)**	**Organizational AI Policy**	From the government's Artificial Intelligence initiative, organizations readiness requires AI-Policy.
		(b)	**Responsible AI-Usage Guidelines**	For any new AI initiatives, the government is responsible for providing AI usage guidelines.
		(c)	**Government Regulatory Compliance**	Organizational requirement to government policy has been identified of the factors influencing for AI.
3				**Processes Readiness**
i	**Business Process Alignment**	**(a)**	**Business Process Designing**	Artificial intelligence (AI) implementation in organizations requires process design and the level to which processes are ready for AI implementation.
		(b)	**AI-Business Process Integration**	Organization business process flexible and potentials demand to implement of Artificial Intelligence.
ii	**External Parties Interaction Readiness**	**(a)**	**Partners, Suppliers, Financiers Readiness**	For AI implementation, the organization must collaborate with partners, suppliers, and financiers in order to be ready.
		(b)	**Customer Readiness**	Customer readiness refers to the necessary knowledge, skills, and motivation to process service production and delivery using artificial intelligence.
4				**Technology Readiness**
i	**Data**	**(a)**	**Data Availability**	The organization require to (reliable & secure) data

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	governance Readiness			availabilities for implementation artificial intelligence.
		(b)	**Data Quality**	Organization requires to quality of data that easily accessible, accurate, consistent, and process to continuous improvement of AI.
		(c)	**Data Accessibility**	Organization has data accessibility sources, and usage guidelines provide for users to understand and apply the data for AI implementation.
		(d)	**Data Platform**	Organization has a readily available platform and data infrastructure that can be deployed for artificial intelligence
ii	**Technology Infrastructure Readiness**	**(a)**	**IT Infrastructure**	organizational availability of IT Infrastructures (Hardware, Cloud, Security, etc.) ready to AI deployment.
		(b)	**Digital Applications & Systems**	An organization needs a specific digital application or system to be ready for AI implementation.
		(c)	**Technology Partnerships**	organization readiness requires to engage in technology partnerships with other organizations to implement AI.
5				**Organizational Environment**
i	**Organizational Structural Dynamics**	**(a)**	**Organization Size**	Organizational Structure Size has a stronger ability to adapt artificial intelligence technology.
		(b)	**Organizational Capability for Innovation**	Organizations have the capacity to drive innovation for AI adoption.
		(c)	**Collaborative Culture**	Organizational preparation has overall facilitated in the complete environment and knowledge exchange across the department level for AI Initiative.
ii	**Environment/ Acceptability**	**(a)**	**Organizational Support for AI**	All support for AI initiatives requires organizational readiness from the top to the bottom.

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	to Change		**initiatives**	
		(b)	**AI-Acceptability**	Organizational readiness necessitated both internal and external AI acceptance.
		(c)	**Change Adaptability**	Organizations have the ability to quickly implement AI and change successfully.
		(d)	**Scalability**	Organizations have the ability to increase the rate of AI implementation while still performing well.
		(E)	**Business Sustainability**	Organizational readiness AI business Sustainability refers to a strategy to continuously improve the environmental and social impacts of business operations.
iii	**Resource Availability**	**(a)**	**Finance Budget for AI Initiatives**	For an organization is required a strategic roadmap of the financial budget for adopting AI and overcoming challenges in the internal system.
		(b)	**Human Resource Availability**	Adoption of AI requires the availability of internal and external organizational resources.
		(c)	**Technical Resource**	Organizational readiness requires the availability of two key resources: technical and human resources for AI.

Note: MF: Major factors, SF: Sub Factors

Organizations interested in integrating artificial intelligence across multiple departments should prioritize enhancing their IT infrastructure as a crucial component of AI readiness (Pathak, & Bansal, 2024). The identified five AI readiness factors are crucial for the successful implementation of AI. It identifies five critical and significant factors: people's readiness, strategy and policies, process readiness, technology readiness, and organizational environment. Before implementing AI in any organization, all of these factors should be considered before the implementation of AI in any organization. The goal of this study is to provide a comprehensive understanding of AI preparedness, enabling researchers to comprehend the foundation of our findings and expand upon current information. This includes factors related to five major themes and in accordance with findings (Hradecky, 2022). The consideration must be given to these five aspects before AI implementation.

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5.2 Conclusion

This research achieved the objective of validating the important AI readiness factors through expert's opinion and their recommendation. The factors identified through SLR by () were validated through experts. The findings reflect the five major factors important before implementing AI in the organization. These five factors were related to people readiness, process readiness, technology readiness, environment and development of suitable strategies and policies. The management should develop effective strategy for these five aspects before AI implementation. Implementation of AI without proper AI readiness may result in failure. Therefore, it is recommended to give due consideration to measuring the readiness related to people, process, technology and availability of suitable culture in the organization.

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