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AI IN DECISION MAKING: A STUDY OF GAINS IN THE SAUDI CONTEXT

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ABSTRACT

Big data is the raw material on which AI thrives or operates. It also has a fruitful role in decision making given the fact that Big Data is characterized by the four Vs: Volume, velocity, variety, veracity, that drive businesses. Managerial decisions that can benefit from real-time analytics, customer relationship management, and prediction of market trends, MIS can have a foot in each of these factors. This study evaluated how business managers in KSA perceive the utilization of AI in their current portfolios, the obstacles they perceive in the integration of AI in business decision making, and the future prospects of AI in Saudi businesses. The study adopted a mixed methods approach by collecting data from 158 entry, middle, and top-level managers from across industry. Follow up interviews helped triangulate the findings which indicated that Saudi managers are not yet entirely reliant on AI in business decision making but are ready to learn, adopt, and adapt to changing needs. It also concluded that accuracy of decisions and trend forecasting are AI features that they most trust especially in strategic decision making. The study concluded with pertinent recommendations for business owners and managerial staff who are the main stakeholders.

KEYWORDS: AI, Decision Making, Businesses, Managers.

1. INTRODUCTION

With the rapid developments in AI in all sectors, many of the traditional business practices whether in sales or data analytics that were the exclusive domain of manual input are no longer considered the best practices nor do they generate as much revenue. AI solutions have facilitated a move away from manual shifting of customer and client data. AI-based decision-making using readily available and deeply analyzed insights dominates the field. Predictive analytics, personalizing contact emailing, lead generation, and a wide array of other business management practices stand to gain from targeted and efficient AI solutions. Mundane and complex tasks, routine updating of records, and progress tracks are only some of the areas where manpower can be freed up to focus on what AI cannot. Development of AI tools takes off from human insights in learning and reasoning to make the systems capable of gathering data, making predictions on different business aspects including trends (Smit, 2024). In a very interesting mix, AI-led tools target a confluence of technological inputs such as computers, cloud technology, network appliances etc. and core business practices, theories, and systems. The result is a corpus of strategies and options that empower managers to streamline operations, boost turnovers, enhance customer/ client satisfaction, and optimize productivity. The influence of AI in business is likely to grow given the pace of development of AI software that beat the human mind in many ways including their capacity for unlimited learning and adoption of these tools is essential for companies to thrive in the future business ecosystems.

AI learning is iterative in nature i.e., problem solving in AI becomes better with every new challenge as the systems use Deep Learning which is similar to how we humans learn in that neural networks are built by AI while learning in this process. Plus, unlike humans, AI tools have infinite scope for knowledge accumulation and storage which gives them the cutting edge over human endeavor. Deep Learning still relies on humans to provide the basic data that AI uses to develop its problem-solving abilities.

The feature of AI to gain from NLP (Natural Language Processing) plays a crucial role in contemporary business sector. Content can now be tailor made using AI as it extracts and feeds customers' or clients' real-time preferences and behaviors. Demographic data, online activity, and individual interests are readily available to curate marketing strategies. Not only the present, AI models can predict how the same customers or clients will behave when a certain service or product is introduced in the segment. At the same time, human input cannot be fully done away with (at least not yet) as AI models are still evolving, they can add to human efficiencies.

Data storage, stacking, and segmentation, however, is far more sophisticated in AI than its human equivalents. Because of the enormous amount of data internet users generate every day and the availability of processing power, artificial intelligence (AI) has become increasingly dependable in recent years. AI has applications in a wide range of industries, including banking, finance, healthcare, education, and transportation. The potential for significant cost savings in financial services is driving the financial industry's rapid adoption of AI. It has the potential to revolutionize the financial industry by opening new avenues for specialized, quicker, and more affordable services. In this sector, Saudi Arabia is a rapidly expanding market with a strong dedication to technologically advanced institutions (Allhidan, 2025).

Even while AI is growing its reach and is being supported by governments, it is still not a crucial element in improving the effectiveness of financial transactions (Isaeva, 2025). A thorough literature analysis is necessary to assess the current level of AI implementation in the Saudi sector, as there is a dearth of published research on this topic. As a result, this paper examines the advantages, restrictions, and difficulties of using AI in the financial industry, emphasizing the significance of moral and legal issues for the industry's effective adoption of AI. The results of the study show that studies have been done on how AI enhances financial sector operations by incorporating essential elements and effective algorithms catered to the demands of the sector.

2. LITERATURE REVIEW

2.1. AI in Customer Satisfaction

Alotaibi (2024) sought to investigate how artificial intelligence affects customer satisfaction as well as the difficulties Saudi Arabian banks encounter while integrating this cutting-edge technology. Using a survey design, the study gathered responses from 100 participants, the majority of whom were bank officials and clients. The findings showed a favorable and significant correlation between customer satisfaction (CS) and artificial intelligence (AI). This implies that the use of AI in banking tends to increase consumer happiness.

Ease of Use only mediators 9.82% of the association between AI and CS, according to the

mediation analysis result, and this relationship is not statistically significant (β=0.0607 (95% Cl: -.0246,.146), z=1.39, p=0.163). The report highlights the necessity of increasing the deployment of AI to boost customer happiness and offers Saudi Arabian banks useful insights. It also provides frameworks for reducing obstacles and hurdles to AI adoption, such as advancing client privacy and data security.

2.2. AI in Business Performance

Alarefi (2024) examined the effects of artificial intelligence (AI) and machine learning (ML) capabilities on the business performance (BP) of technology companies in the Kingdom of Saudi Arabia (KSA). The study suggests that AI and ML capabilities have an impact on business performance, building well-known ideas like the Resource-Based View (RBV) and the Technology Organization Environment (TOE) framework. Data Quality (DQ) is expected to mitigate their impact, while Technological Readiness (TR) is expected to mediate them.

The results demonstrated that business performance was positively impacted by AI and ML capabilities. Technological readiness acted as a mediator in the relationship between AI and ML capabilities, and BP. The influence of AI capabilities on BP was greatly enhanced by the quality of the data. The business performance of enterprises in KSA will increase with the presence of efficient AI and ML capabilities as well as the development of a high level of technological readiness and data quality. Considering these conclusions, Alarefi (2024) suggested a step-by-step methodology for managing AI at both the macro and micro levels to direct its advancement and incorporation into the financial industry. To give a thorough grasp of the opportunities, difficulties, and areas for development to optimize AI's potential in the Saudi financial sector, the framework also incorporates insights from the body of existing research.

2.3. AI in Business Transformation

A lot of research has been done on methods and strategies for choosing and deploying digital technologies that help businesses achieve their objectives in digital transformation Holmström (2021). The need for such research has increased due to the recent explosion in Artificial Intelligence (AI) technologies, which are being used more in a variety of organizational practices. This has created both new opportunities and challenges for managers of digital transformation processes. In this paper, a framework for assessing organizational AI readiness is, an organization's capacity to use AI technologies to facilitate digital transformations presented in four important dimensions: technologies, activities, boundaries, and goals [8]. This framework is meant to support efforts to address one of the first of these challenges. According to the study, it can make it easier to analyze an organization's socio-technical AI state now and its chances for a more comprehensive, value-adding socio-technical deployment in the future. More thorough conceptualization of the roles that AI may and will play in digital transformation is encouraged by the AI ready framework.

2.4. AI and the Human Workforce

The study investigates how leadership, employee engagement, artificial intelligence (AI), and economic success interact in Saudi Arabia's manufacturing industry (Alateeg et al, 2025). Using a cross-sectional methodology, an online survey questionnaire was used to gather data from employees in March 2025. To ensure accessibility and viability, convenience sampling was used to collect responses from a varied workforce. To investigate the proposed correlations, data analysis was done using Structural Equation Modeling (SEM) using SmartPLS. The results show that AI has a major impact on leadership and employee engagement, emphasizing its function as a strategic enabler that improves staff motivation, creativity, and decision-making.

Economic performance is positively impacted by leadership, and economic performance is strongly impacted by employee engagement. Significant indirect effects are also identified by the study, where AI affects economic performance through employee engagement and leadership Sindi and Salem (2025). These findings highlighted how crucial it is to combine AI with good leadership techniques and an engaged culture to propel organizational success. The report emphasizes how AI indirectly affects organizational dynamics and provides useful advice on how to use AI to improve economic results, employee engagement, and leadership (Al-Baity, 2023). The findings emphasized the necessity of a comprehensive approach to AI adoption for businesses in the manufacturing industry and beyond, fusing technology innovation with human-centric tactics to gain competitive advantage and sustainable growth.

The corporate and research settings are evolving due to the development of artificial intelligence. Artificial intelligence-powered products improve efficiency, raise client engagement, and expedite decision-making. However, organizations in

emerging economies doubt their own ability, resources, and strategic commitment to support the effective deployment of such technology. Additionally, there is a glaring dearth of study on artificial intelligence across a few industries, especially financial institutions. Our study addresses this knowledge gap by assessing Uzbek financial institutions' readiness for artificial intelligence (Isaeva, 2025).

Researchers integrate the Technology-Organization-Environment and Artificial Intelligence Readiness Index to present a new framework with seven key components. The findings are predicted in survey data collected from 113 bank employees. Organizations can use the proposed framework to identify their areas of growth and strength and to successfully deploy AI-based solutions. This study contributes to the body of information on organizational artificial intelligence readiness and provides useful insights for financial institutions (Hamdan, 2025).

2.5. Ethical Issues

There are still several obstacles to operationalizing ethical frameworks for responsible AI, even in the face of regulatory efforts and their widespread availability. This study looks at De Volksbank's ethical governance framework as a possible organizational configuration of structures and procedures required to truly operationalize AI ethics to close the current gap between ethical ideals and AI practices in the financial industry. The report offers a thorough analysis of De Volksbank's governance structure, outlining its mandate, functions, and duties in relation to many facets of AI ethics governance. It also goes into detail on four key concepts of operationalizing ethics, with a particular emphasis on AI ethics as a problem in (1) organizational design, (2) multidisciplinary expertise and responsibilities, (3) proactive governance, and (4) high-quality methods for ethical inquiry. Since trust is essential to the financial industry, reliable AI is essential to its long-term viability and legitimacy. Therefore, the purpose of this study is to improve knowledge about operationalizing AI ethics in banking and to encourage other organizations that wish to create ethical frameworks for their AI systems. Related to governance structure for AI ethics, Krijger's (2023) investigation aimed to promote the development of responsible AI practices within the banking industry. Although the financial industry has long welcomed technical advancement, growing ethical issues have been raised by the incorporation of AI into systems that are focused on customers and operations.

2.6. AI in Saudi Industry

Taking a two-pronged approach, Eskandarany (2024) investigated how the Saudi banking industry may embrace AI and ML, and how well machine learning and artificial intelligence can defend the Saudi banking industry against cyberattacks. Numerous board members of well-known Saudi Arabian banks were interviewed in-depth as part of a qualitative research technique. The report emphasizes the advantages and disadvantages of incorporating cutting-edge machine learning and artificial intelligence technology in this heavily regulated sector.

According to research, banks can effectively manage cyber dangers and comply with regulatory requirements by utilizing advanced artificial intelligence and machine learning technologies, especially in areas like threat detection, fraud prevention, and process automation. Significant obstacles are also noted by the study, such as a lack of unified artificial intelligence policies, a lack of technology infrastructure, and ethical worries about algorithmic bias and data protection. The importance of the board of directors in establishing agreements with suppliers of artificial intelligence technology, obtaining resources, and offering strategic directions was underlined by the interviewees. The results of this study have important ramifications for banking officials as they navigate the challenges of using AI and machine learning in financial services, especially in emerging nations.

Allhidan's (2025) study that has much significance to the current one, inquired how the Saudi Data and Artificial Intelligence Authority influences digital innovation and sustainable business practices in Saudi Arabia. The findings show that by supplying infrastructure, important data, and business development, the Saudi Data Artificial Intelligence Authority for Digital Innovation created and supported sustained growth. The study's suggested training programs and funding mechanisms for digital innovation and acceptance have grown because of the findings, which also demonstrated a favorable correlation between the government's embrace of digital innovation and sustainable practices. In another study, analysis of empirical data from Saudi Commercial Banks revealed good impact of digital transformation on financial sectors specifically in Saudi Commercial Banks in 2024[11].

2.7. Research Questions

The national development policy outlined in

Vision 2030 aims to transform the business sector by driving digital transformation, fostering innovation, and diversifying the economy away from oil dependence. A robust inclusion of technology in all aspects and their integration into sectors like AI are truly objectives that look ahead at the future. In this background, the research questions that the study aims to answer are

1. What is the role of AI in decision making in contemporary Saudi business sector?
2. Do managers perceive roadblocks in the use of AI in business decision making?
3. What are the prospects for AI to play a lead role in decision making in the Saudi context?

3. METHOD

This study adopted a mixed-methods approach: The rationale behind this was that AI in Saudi business sector is a relatively new entrant. Integration of qualitative and quantitative data, therefore, provides a more complete picture, allows for triangulation of findings, and enables a more thorough analysis of both statistical results and nuanced, contextual details. Moreover, application or adoption of technology is dependent on the human workforce, detailed interviews with stakeholders was considered suitable to enrich the quantitative findings.

The primary data collection tool was a survey administered to 150 middle and upper middle managers across 12 Saudi businesses. Four inclusion parameters were identified to maintain data homogeneity: 1. Business headquartered in KSA; 2. Annual turnover between _____SAR and _____SAR; 3. Managerial position with decision making authority; 4. Unbroken role as Managerial staff for at least the past 6 months.

A preliminary inclusion survey was administered to 210 individuals via email, type of business was not a factor under consideration. The population thus included businesses such as food industry, garment, service providers, construction, and petrochemicals. Questionnaire 1 below is the screening test used in the study. All 210 individuals responded to the screening test well within the timeline, however, only 158 of the responses fitted the inclusion rubric. The study was taken forward with these participants who were administered the main questionnaire after piloting the instrument with 30 participants. Cronbach's alpha results are summarized in Table 1 below.

Questionnaire 1: Inclusion test

1. Where is your business headquartered?
   ☐ KSA — continue
   ☐ Outside of KSA — End survey

2. What is the annual turnover of your business?
   Between _____SAR and _____SAR — continue

3. Does your managerial position call for decision making?
   ☐ Yes — continue
   ☐ No — End survey

4. Have you been a manager in the past 6 months with no break in the role?
   ☐ Yes — continue
   ☐ No — End survey

Table 1: Cronbach's Alpha for Internal Consistency and Reliability.

Dimension Measured	Cronbach's Alpha	N of Items	Remarks
Familiarity with AI	0.963	5	
Adoption of AI in decision making	0.907	5	One item reworded
Benefits in applying AI in decision making	0.955	5	
Challenges and obstacles in using AI in decision making	0.750	5	One item reworded
Role of humans in the presence of AI	0.893	5	
Future possibilities	0.912	5	

Internal consistency of the questionnaire was found to be good with Cronbach's Alpha value at 0.7

or above indicating the robustness of the instrument. Two items in the questionnaire were reworded as the pilot indicated some amount of ambiguity in their meanings. The overall reliability of the instrument was high.

4. DATA ANALYSIS AND RESULTS

The study participants in the final survey were 158 males and females employed at different managerial levels in businesses headquartered in KSA. The survey was emailed to the participants and adequate response time of one week was allocated. All responses were received well within the time frame. The data was thereafter Table 2 below summarizes the demographic information of the participants.

Table 2: Demographic Information.

Gender	**Male**	**Female**	
	108	50	
Age	25-34	35-44	45-54
	23	72	63
Experience	½ y-5y	6y-10y	+10y
	36	45	75
Position in management	Entry level	Middle level	Top level
	39	82	37

As per the data summarized in table 2, the sample comprised of 108 males (68.3%) and 50 females (31.7%), highlighting a male predominance in managerial roles in Saudi business sector. Regarding age, 14.5% of the participants were aged between 25-34, suggesting the poor presence of early-career managers, followed by a high 45.5% in the age group of 35-44 years and again a low of 39.8% in the 45-54 years bracket.

Managerial experience is notably concentrated in the higher of the three experience classes, with 22.7% having over ½-5 years of experience, 28.4% having 6-10 years of experience, and 47.4% having more than ten years of managerial experience.

This indicates that managerial positions are attained as employees gain on experience, amongst other factors. Lastly, participants were employed predominantly in middle managerial roles at 51.8% and comparable numbers in the entry level and top level positions.

Table 3 below summarizes the reverts obtained for the main questionnaire which had 30 items in all loading onto six factors or dimensions in the application of AI in decision making: Familiarity with AI, adoption of AI in decision making, benefits in applying AI in decision making, challenges and obstacles in using AI in decision making, role of humans in the presence of AI, and future possibilities. All responses were elicited across the standard five point Likert Scale with 1 signifying 'strongly disagree' and the highest score of 5 signifying 'strongly agree' with the statement.

In table 3 below, the weighted means for each of the statements under the dimension measured was computed along with the overall mean for that dimensions.

The first dimension that the survey measured was Saudi managers' familiarity with AI tools that can be used in better decision making in their area of occupation. Five statements were designed to elicit managers' awareness of AI tools, the weighted means were low for all statements pertaining to current knowledge of the managers. As far as actual understanding, awareness, and professional exposure to AI are concerned, all parameters indicate below average markers. These findings are also corroborated by other factors tested later in the questionnaire. However, Saudi managers show a strong enthusiasm in adopting AI tools into their decision-making duties. The gap between readiness (m=4.25) and real familiarity (~2.2) is indicative of readiness, though latent, to adopt AI tools in business decision making. As indicated earlier, qualitative data was collected in the form of voluntary interviews (in an open online window provided for the purpose and communicated to the managers at the time the survey was initiated), and all of the 12 candidates interviewed expressed excitement about the potential of AI in business decision making.

One leading theme identified in the interview transcripts was that technology is so much present in the environment that to remain alien to it now is almost impossible.

Another connected opinion shared was that managers of the future will be irrelevant if they fail to adopt and adapt to technology, hence, the sooner they did so, the better they would be in their performance.

The second dimension that the survey measured was the actual adoption of AI by Saudi managers in their current work place and profile. Overall, the pattern indicates that there is some steady movement towards greater reliance in AI tools in decision making but it is mostly sporadic as Saudi managers so far use AI only when strategic decisions are to be taken.

At a mean of 2.28, AI is certainly not the top choice of managers in decision making, not discounting the fact that availability of the tools is also at a low mean

of 2.04.

Table 3: Dimensions of AI in Decision Making in Saudi Business Sector.

Dimension	Statement	Strongly Disagree	Disagree	Not sure	Agree	Strongly Agree	Weighted mean
Familiarity with AI							
	I clearly understand what AI in business environment means	58	61	9	21	9	2.13
	I am fairly updated on new AI tools and apps relevant to my occupation	64	48	11	22	13	2.19
	I can confidently verbalize the support that AI extends to my occupational decisions	71	36	15	20	16	2.20
	I have in-job opportunities to update my skills and knowledge on relevant AI developments	58	61	0	24	15	2.22
	I have keen interest in integrating AI into my work	6	17	8	27	100	4.25
Overall mean							**3.0**
Adoption of AI in decision making							
	Before important landmarks, we utilize AI outputs for enrichment of decisions	8	31	10	42	67	3.82
	Key decisions at my workplace are taken by managers after they analyze AI generated insights	27	13	9	53	56	3.62
	I can say that AI is part of my routine decision making process	57	49	12	31	9	2.28
	At the organizational level, AI tools are available to me to aid in decision making	64	65	0	16	13	2.04
	My senior management is supportive of the use of AI in decision making	28	16	6	52	56	3.58
Overall mean							**3.07**
Benefits in applying AI in decision making							
	Every time I use AI, decision making at my workplace becomes less time consuming	16	20	0	49	73	3.9
	The quality of decisions I take using AI is better than exclusively human intelligence	8	19	7	58	66	3.9
	I can foresee future trends more accurately with the use of AI	25	15	11	48	59	3.9
	AI tools have given me a competitive edge as a manager	19	27	0	52	60	4.1
	Resources (human and material) are optimally conserved and used with the use of AI tools	29	13	74	25	17	2.9
Overall mean							**3.74**
Challenges and obstacles in using AI in decision making							
	AI tools and their implementation cost are high for global use at my workplace	29	26	66	16	21	2.84
	I am not certain of the quality of data available for effective AI application at my workplace	9	18	12	58	62	3.92
	I believe the managerial staff lack adequate training and skill in the use of AI especially in interpreting its output	21	14	0	41	82	3.94
	I have ethical and transparency concerns in the use of AI as too much confidential data is fed into the tools for output	14	12	0	59	73	4.04

	I don't feel enthusiastic about using AI in day-to-day decision making	41	57	7	37	16	2.56
Overall mean							**3.46**
Role of humans in the presence of AI							
	In the present context, AI is a good support and not a replacement of human workforce	7	21	9	62	59	3.92
	I can rely on AI generated insights for accuracy	14	24	13	46	61	3.73
	In a business environment, human intuition is still a special contribution despite AI where complex decisions are to be taken	27	10	0	66	55	3.71
Dimension	**Statement**	**Strongly Disagree**	**Disagree**	**Not sure**	**Agree**	**Strongly Agree**	**Weighted mean**
	A machine cannot take responsibility for decisions at the workplace, only humans can	14	9	14	50	71	3.98
	I feel most confident when working with AI as a team	27	22	16	39	54	3.45
Overall mean							**3.76**
Future possibilities							
	In the coming times, strategic decision making will be more an AI domain as its dataset will become richer for processing best decisions	8	28	15	32	75	3.87
	My organization is looking at AI as a more active tool in the future	35	49	13	25	36	2.86
	Training and skill enhancement will be needed to keep pace with AI developments	26	26	0	19	87	3.73
	AI will not threaten but enhance human output	38	36	26	31	27	2.83
	I feel positive about the future of my work profile with a bigger role for AI in decision making	41	29	25	17	46	2.99
Overall mean							**3.26**

Three positive outcomes under this dimension emerge though: One, organizational will is visible in the top management supporting the use of AI (3.58), and AI is definitely in as far as important decisions are concerned (means of 3.82, 3.67). This roadmap clearly indicates the managers' state of readiness to work alongside AI tools in business decision making despite of limited institutional inputs which cause an operational gap. The managers were questioned on this construct during the interviews to help triangulate findings. The leading theme identified was that there is a certain degree of inhibition amongst the 45+ age group of managers (who are also in the top managerial positions) towards technology adoption. It is felt that they are not as enthusiastic to leave the old school in business decision making and have a lot of distrust towards data that is the key strength of AI tools. The younger managers, however, (both males and females) are more willing to experiment and learn new skills to stay relevant in the occupational scenario. At the same time, managers also opined that the senior managers do not discourage the younger incumbents from adopting AI.

The third dimension that the survey inquired into was managers' perceptions of the benefits in applying AI in decision making. The overall dimension mean here is a robust 3.74 which is only the second highest of all the six dimensions. Participants reported high satisfaction with the use of AI in terms of time taken for decision making, quality of decisions, and ability to predict trends at 3.9 each. Taken together, perception of gains in these three domains practically translates to both short term and long-term benefits for the organizations. While the earlier two dimensions indicate inconsistency in commitment to AI integration, the readings in this dimension indicate that when managers do resort to AI tools in decision making, their satisfaction with the output is highly rewarding. This indirectly reveals great potential and readiness of human workforce for AI adoption and with positive perceptions the likelihood of sustainable AI use can be taken to be promising. It is remarkable that individual gains are reported (AI tools have given me a competitive edge as a manager) with a mean value

of 4.1 and this recognition of AI as a value addition to the managers' organizational roles shows that managers are sensitive to the occupational needs of the future. The individual interviews also brought up this awareness of the managers to changing market demands and the need to keep themselves abreast of technological developments especially those that could set them apart from their competitors.

The fourth dimension that the survey measured dealt with the challenges and obstacles in using AI in decision making. There were five assertions under this factor and three of these were rated highly by the managers which concerned quality of data, training and skill development of staffers, and data privacy concerns (mean values 3.93, 3.94, 4.04 respectively). Interviews revealed that data protection concerns are a big weight on managers' shoulders as they deal with a large amount of organizational and individual data and breaches or leaks can be detrimental to them and their employers. Further, such concerns also indicate lack of knowledge on the efficacy and usage benchmarks in ensuring data protection and privacy while using AI tools. Overall, the onus to rule out such real or phobic concerns rests with the organizations who have to factor in expenses on managerial and staff training in the latest technological developments. Some managers also voiced their fears that some AI tools are infamous for creating fake or unreal data and if they happen to take decisions based on such data their organizations may have to incur losses. On the same plane, managers also reported that their employers are not happy with additional costs to company such as the cost of new AI software and the subsequent subscription costs, this deterred them from thinking of greater reliance on AI for decision making.

The fifth dimension under study was the relationship between technology and human workforce. The dimension mean was a reasonable 3.76 though it was interesting that Saudi managers are conscious of the power of technology as well as the job of humans to use it responsibly. The managers in this study appreciated the high levels of accuracy afforded by AI tools and their malleability as teammates to humans, yet they had clarity that the ultimate responsibility and fine tuning of decisions still rested with them. This opinion stirs up an important and solemn debate about the extent to which AI tools can be entrusted with the tasks that humans perform in businesses, this is a multidimensional issue with social, psychological, cultural, and emotional angles to it that deserve in-depth inquiry. Personal interviews added to these perceptions as managers confided that AI is strictly an aid in their job and not yet an indispensable workmate.

The sixth and last dimension that the survey measured the future of AI in the Saudi business domain. The overall mean for this dimension was 3.26 with a clear roadmap chalked ahead by the managers. At organizational and individual levels, the managers are aware of what the future of businesses is likely to be vis-à-vis the developments in AI. At a weighted mean of 3.87, the managers acquiesced in large numbers that in the coming times, strategic decision making will be more an AI domain as its dataset will become richer for processing best decisions, and for this the employers and managers have to prepare themselves. Interviews with managers revealed a growing restiveness that in the absence of on-job skill development, they may find their seats taken by machines.

At the same time, some managers expressed enthusiasm that the human intelligence will take precedence in decision making and AI will remain what it is, an aid.

5. CONCLUSION

This study set out to answer three questions: 1. What is the role of AI in decision making in contemporary Saudi business sector? 2. Do managers perceive roadblocks in the use of AI in business decision making? 3. What are the prospects for AI to play a lead role in decision making in the Saudi context?

In a mixed methods approach, the study triangulated results based upon a large-scale survey with 158 participants, and follow up voluntary interviews with Saudi managers. Results indicate that the managerial staff have not yet integrated AI tools as a regular feature in their decision-making mechanisms but are optimistic, aware, and enthusiastic to do so as they are tuned to the changing global expectations. In short, they are in a state of preparedness to learn, adopt, and adapt to technologies. This finding answers the first research questions. To answer the second point of inquiry, yes, roadblocks are perceptible at several levels, the most significant of these being the lack of adequate skills and knowledge in the use of AI while not compromising on the ethical and privacy fronts. Managers are also somewhat sceptical about trusting AI with the large datasets that pertain to their organizations and clients/ customers. Lastly, the prospects for AI integration into Saudi business sector are bright as technology is ambient and the Saudi managers are aware that if they fail to board

the omnibus, they would be left behind. It is heartening that the senior level management are conscious of the changes around them and do not discourage their subordinates from adopting new mechanisms, they need to be prepared to train and upskill their managers too.

6. RECOMMENDATIONS

This study is a unique effort to identify the status of AI-readiness of business managers in KSA. With a reasonably large and diverse respondent group, it ventures to make the following recommendations based on the findings.

1. Business heads need to factor in the role of automation in reducing costs incurred in terms of time and human labor spent in decision making as repetitive tasks can be assigned to the former.
2. AI can help human workforce tide over the risk of error in handling and analyzing large data, businesses need to explore how this can be integrated into their unique environments.
3. Precision and consistency are features of AI and manual processes that require these can sometimes be marred by human error. Businesses should consider assigning these to machines.

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