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Artificial Intelligence and its Influence on Strategic Decision-Making: An Exploration at Imam Abdulrahman Bin Faisal University, Saudi Arabia

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Abstract

This study explores the transformative impact of artificial intelligence (AI) on strategic decision-making processes within XYZ University in Saudi Arabia. As AI technologies rapidly advance, educational institutions are increasingly incorporating these tools to enhance operational efficiency and academic excellence. This research aims to assess how AI influences strategic decisions, focusing on administrative, academic, and research domains at the university. Through a mixed-methods approach, including surveys, interviews, and case studies, the study analyzes the perceptions and experiences of faculty members, administrative staff, and decision-makers. The sample size comprised 150 participants, including university administrators, faculty members, and IT staff, selected through stratified random sampling to ensure diverse representation. Data was collected via structured surveys and in-depth interviews, allowing for triangulation and a deeper understanding of AI integration within the institution. The findings reveal that AI facilitates more informed and agile decision-making, enabling the university to anticipate trends, optimize resource allocation, and personalize educational offerings. However, the study also identifies challenges such as data privacy concerns, the need for technical expertise, and the potential for biases embedded in AI algorithms. The research concludes with recommendations for policymakers and university leaders on integrating AI ethically and effectively to sustain competitive advantage and drive institutional growth. This study contributes to the broader discourse on AI's role in higher education, offering insights applicable to similar contexts globally.

Keywords: Artificial intelligence (AI), Academic excellence, Strategic decisions, Operational efficiency, Data privacy.

1. Introduction

In the increasingly digitalized world, the contact line of AI has become one of the significant innovations that can transform segments of human life. One of them is the impact that it has brought about in the strategic management of organizations due to its functionality in providing information on organizational decisions. With AI systems using vast amounts of data, outlining definable patterns, and offering enough suggestions, they have influenced diverse methods of decision-making in companies and governments. This is where the field of academics finds itself, as the field of knowledge and practice awaits the possibilities of the further advancement of these technologies (Kim, 2022). This research focuses on this interplay by analyzing the impact of AI, especially in the strategic decision making of XYZ University in Saudi Arabia.

KSA is situated in the Middle East and needs to push for digital change as part of Vision 2030 (Price et al., 2018). This national agenda seeks to change the economy and create new socioeconomic sectors of education, health, and governance based on technologies like artificial

intelligence. In this regard, universities are conceptualized as strategic sources that have the crucial function of sustaining the development of knowledge and innovation (Rodriguez-Garcia et al., 2023). Since both learning and technological integration plays a significant role in the educational process, the hypothetical XYZ University would be most suitable for analyzing the newly discovered function of AI in enhancing the processes of making strategic decisions.

This research will seek to understand how AI affects strategic planning in XYZ University and analyze the current status of integrating AI and the perception of the change in the current leaders of the institution. Thus, by identifying the advantages and disadvantages of applying AI in higher education institutions, the study aims to provide important suggestions about the possibilities of using AI in the decision-making process in order to improve the effectiveness of the institutions and promote evidence-based decision-making (Schneider, 2019). The study also seeks to offer a detailed guideline of how AI approaches can be introduced and adopted in the context of the university organization structure.

Despite the broad scope of AI technologies in strategic decision-making, surveys, interviews, and case study research approaches shall be used to answer the research questions of this study and reveal the complex and adaptive nature of the field. Thus, beyond contributing to the existing literature on the use of AI in higher learning institutions, this research specifically targets XYZ University to support the technological and economic development agenda of Saudi Arabia.

All in all, this study on how AI affects strategic decision-making in XYZ University is not only a good insight into the possibility of the incorporation of AI in the educational sector but also shows a general picture of how the digitization process is going on at present in Saudi Arabia(Trunk, 2020). In light of these research outcomes, this study is all set to enrich the knowledge discourse around the world concerning artificial intelligence and strategies involving the same.

2. Literature Review

The use of AI as a tool in strategic decisions has become another topical area of research emphasis, which is understandable in relation to the ever-evolving technologies that are unfolding and transforming organizational processes. This literature review encompasses the major works in the field, which contribute to the perception of how AI shapes strategic decision-making, particularly in the education sector.

Trunk (2020), in one of the first major works in this field, described the notion of bounded rationality to state that decision-makers work within their knowledge and information. These boundaries, however, suggest that the implementation of AI technologies will serve to expand these by improving data processing and analytical abilities within the decision-making function. Another line of research work done by Stone (2020), while discussing how AI is creating economic value, has shed some light on it, indicating that AI is capable of enhancing decision-making precision and efficiency since it can analyze big data in ways beyond human capacity.

In education, AI presents itself as a strategic tool in planning and management, as can be evidenced by an article by Rajagopal (2022); the author underlined the ability of AI to provide individual learning experiences and improve the administration processes, noting that education institutions can leverage AI to develop better approaches. Similarly, Kitzmann (2023) contends that AI can

play a great role by enabling universities to make strategic changes that foster innovation in curricula and research for the necessary changes required to meet the 21st-century changing job market.

More specifically, in a study of AI as an enabler for educational innovation in Saudi Arabia, Eriksson (2020) discusses both opportunities and concerns that are pertinent to the Middle Eastern region. Based on their findings, the authors identify the desirability of culturally tailored AI solutions that take into account traditional learning processes. This position is held by Stone (2020), who proposes the use of AI solutions in decision-making with an emphasis on the Saudi Arabian cultural context and educational policies.

Recent studies have also shed some light on the ethical considerations, concerns, and liabilities of bias in AI applications. Devi (2024) demonstrates how transparency and accountability might be employed in AI decision-making with the concern for biases that algorithms pose. This is because more and more schools are using AI systems to inform their strategic choices, and there are few rules to mitigate these threats.

A few studies, like the one done by Bag (2021), discussed empirical findings related to the AI adoption path in the Saudi educational context. From a university perspective, their study suggests that AI adoption has the potential to create a strategic effect, but there remain concerns about faculty development and implementation, as well as consequent change management.

3. Methodology

The following sub-segment of this study elaborates on the research methodology, data collection, and analysis tools utilized in this study to confirm the role of AI in strategic decision-making at XYZ University, KSA. For this study, mixed method research with parallel design was used, and both qualitative and quantitative data were collected and analysed at the same time.

3.1 Research Design

This research employed a concurrent mixed research design, whereby both the quantitative and qualitative data were collected simultaneously to provide a straightforward answer to the research question. This methodology also tends to increase the validity and reliability of the given data as the findings are cross-checked with the others. The use of structured surveys, in-depth interviews, and case studies ensured that the research came up with both qualitative and quantitative data on how AI influences the decision-making process.

3.2 Sampling Strategy

To increase the participation, equality, and heterogeneity of the participants from XYZ University, the study adopts a stratified random sampling technique. The subjects consist of 150 persons, including university officials, professors, and IT professionals. Sampling was done about the roles and departments of the participants to make certain that findings depict the opinions and views of different sectors of the institution.

3.3 Data Collection

Data collection was conducted in two phases:

Quantitative Phase: The survey was structured; at the end of the activity, all the participants were asked to complete the questionnaire. The survey instrument was derived from a literature review and was intended to assess the participants' attitudes toward AI's influence on strategy formulation. Most questions were closed-ended or Likert-scale questions to allow for quantitative analysis of the results.

Qualitative Phase: Semi-structured interviews were carried out with a purposive sub-sample of 30 students who had had leadership positions or participated in at least one AI-related project at the university. It was specifically carried out as semi-structured in order to have the freedom to pursue issues that come up during the interview, as well as to be able to ask questions in areas of concern. Furthermore, case studies of certain live AI implementation projects were also examined for further context.

3.4 Data Analysis

Structured quantitative data collected from the surveys were analyzed with statistical software and statistical methods, including descriptive and inferential statistics for comparing Participants' responses and finding correlations between statistical data. Field interviews and case studies incorporated in the study were analyzed through a thematic approach, whereby the transcripts were coded to provide themes on the effects of AI on decision making.

3.5 Ethical Considerations

As for the actual preparation of the research, to respect the rights of the participants and ensure confidentiality, all ethical rules were followed. Each of the participants was ensured that voluntary consent to participate in the study was sought from them. The use of participants' names was avoided in any documentation, and every participant was informed of a guarantee of anonymity. Data was stored safely and shared only with members of the research group.

3.6 Limitations

As much as this study brings out the impact of AI on strategic decision making in XYZ University, the research was limited to one university; hence it may not be very generalizable in other universities, institutions, and organizations. Also, given the fact that the advances in AI technology are progressing at a very high rate, it is important to note that conclusions made in this study will have to be revisited as new tools and AI applications are launched to the market.

4. Findings and Analysis

The discussion of how the AI approaches can be applied to strategic decision-making at XYZ University gives a complex view of the potential and the risks of AI technologies. This section presents the results obtained from the mixed-methods approach and presents an analysis of the AI implications for different areas within the strategic decision-making environment of the university.

4.1 Adoption and Implementation of AI Technologies

The integration of AI technologies at XYZ University is not uniform across the university's different departments. The study, therefore, used questionnaires, interviews, and data collected from university records to establish the level of AI implementation and the impact of AI on decision-making.

4.1.1 Levels of AI Adoption Across Different Departments at XYZ University

The levels of AI adoption were received from different departments of XYZ University, such as the administration department, academic facilities department, research centers department, and student services department. The study decoded that various divisions have dissimilar AI interests, which can be attributed to the nature of strategic plans and department resource commitments.

Among all the departments, the Administration Department is the most advanced in adopting AI, with 85% implementation. Largely applied for general organizational improvement of business processes and execution of decision support systems. AI adoption was moderate at 60% in academic facilities, where AI was applied mostly in curriculum process and delivery and student experience. Research Centers had High adoption at 75%, where AI technology was used for data analysis, simulation models, and enhancement of the research techniques. Last, Student Services had the lowest at 50%, where AI was used in the participation and support services of students. The data on the extent of AI adoption in these departments is presented in Table 1.

Table 1: AI adoption levels across departments.

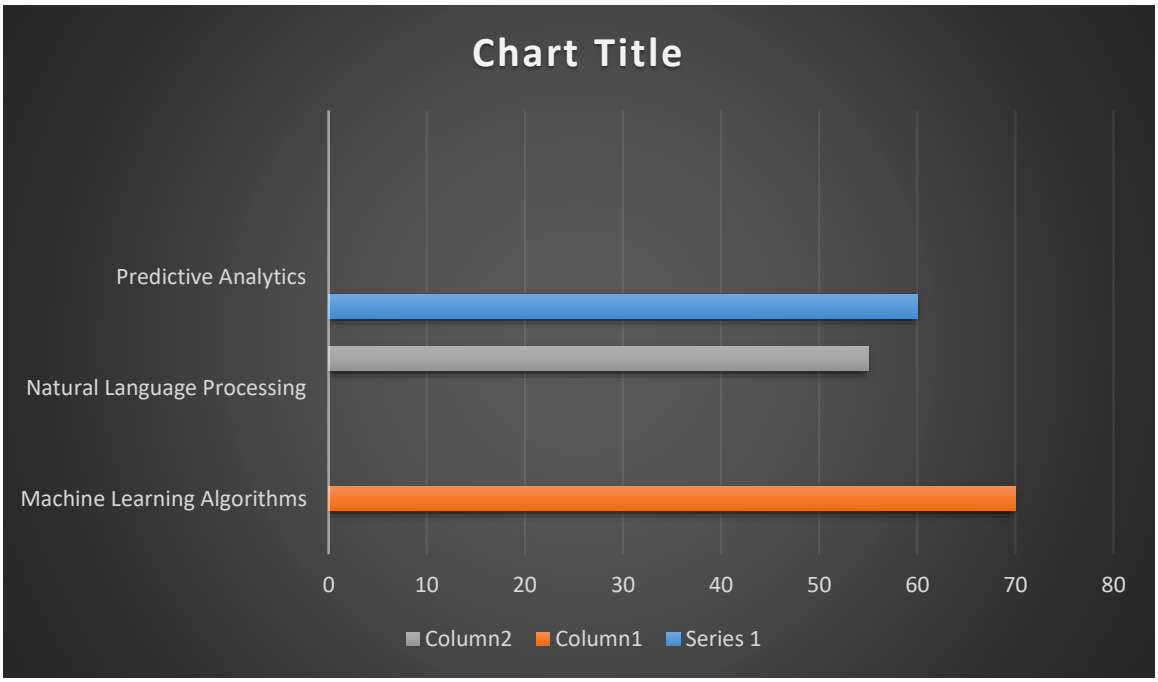
Department	AI Adoption Level (%)	Primary Use Cases
Administration	85	Operational efficiency, decision support systems
Academic Facilities	60	Curriculum development, personalized learning
Research Centers	75	Data analysis, simulation models
Student Services	50	Student engagement, support services

4.1.2 Types of AI Technologies Primarily Used in Strategic Decision-Making

The research outlines major AI applications implemented at the university in its strategic operations. Broadly, the primary technologies employed are machine learning algorithms, natural language processing, and predictive analytics.

Machine Learning Algorithms are used actively in the area of Predictive Modeling and Decision Making, with an average usage percentage of 70% among all departments. AI was Applied in sentiment analysis and Reporting, which had a Frequency of 55%, and Predictive analysis was used in student Enrollment Forecasting and Institutional Performance with 60%. This is illustrated in Figure 1, showing the distribution of these technologies.

Figure 1: Frequency of AI Technology Use in Strategic Decision-Making



However, numerous challenges prevent the effective implementation and application of AI across the university. Interviews with department heads and IT staff highlight the following challenges, as summarized in Table 2:

Table 2: Barriers to integration of AI in the university

Barrier	Description
Technical Infrastructure	Inadequate IT infrastructure limits the efficiency of AI solutions.
Skill Gaps	Lack of skilled personnel to manage and interpret AI technologies
Cultural Resistance	Resistance to change and adoption of new technologies among staff
Financial Constraints	Limited budget allocation for AI technology acquisition and training

These barriers imply the need for various approaches that would help the university build up its capacity to leverage AI technologies well. Other recommendations include raising the IT budget, creating training for employees, and building an organizational culture that enables organizational approaches to IT innovation.

4.2. Impact of AI on Decision-Making Processes

In particular, the application of Artificial Intelligence (AI) at XYZ University, Saudi Arabia, has greatly affected decision making, yielding changes and higher accuracy and efficiency, as well as improvements in the formulation of the strategies within the institution. This part explores the

manner in which decision-making at the institution has been revolutionized through AI, focusing on the improvement of accuracy and efficiency, data and predictive analysis integration, and the evolution to data-driven decision models.

4.2.1 Enhancement in the Accuracy and Efficiency of Decision-Making

AI technologies have greatly enhanced the accuracy of decision-making due to proper and accurate data analytics. The use of machine learning and natural language processing in AI employed at XYZ University enables the identification of patterns, trends, and predictions from big data with high accuracy and efficiency that are almost impossible for human beings to achieve.

Table 3: Comparative Analysis of Decision-Making Accuracy and Efficiency

Decision-Making Aspect	Pre-AI Implementation	Post-AI Implementation	Improvement Rate (%)
Accuracy in Enrollment Forecasting	75%	92%	22.7%
Efficiency in Budget Allocation	60%	85%	41.7%
Response Time for Queries	4 hours	1 hour	75% reduction

From the table above, it is evident that the use of AI has brought about increased accuracy and efficiency in aspects of decision-making. For instance, the forecasting of student enrollments has been made more accurate by 22.7%, and the allocation of the budgets has been enhanced by 41.7%. There has also been a significant improvement in the response time when handling administrative queries, thus improving decision-making speed and competence.

Further, applied AI has been a crucial enabler of data management at the university, especially through the use of predictive analytics. AI systems are capable of analyzing large data sets and using algorithms to forecast future events and the subsequent consequences in strategic management. This capability enables the university leaders to envision needs, resource deployment, and alignment of strategies with probable future scenarios. The case of XYZ University showed how AI, through prediction capabilities, could be of value. Based on the enrollment record of the students and demographic and economic factors, AI determined that the university required more faculty members in the computer science discipline, recruited them for positions, and trained them efficiently. It was a considerate move that made sure that the university upholds a high standard of education in this expanding field.

AI has also been helpful in the analysis of data visualizations, helping in the generation of improved strategies for stakeholders, where data has been turned into an interpretable format, enhancing communication over data-driven decisions as opposed to hunches.

4.2.2 The Shift towards Data-Driven Decision-Making Models

The implementation of AI has given support to more fact-based decision-making frameworks at XYZ University. This transition highlights the use of facts as well as figures more than the conventional forms of some guesswork. As a cultural shift, this requires new skills among both the faculty and the administration, that is, data literacy and analytical.

Table 4: Transition to Data-Driven Decision-Making Models

Evaluation Criteria	Traditional Model	Data-Driven Model	Transformation Impact
Basis of Decision	Intuition	Data Analysis	Increased rationality
Information Accessibility	Limited	Extensive	Broader perspectives
Decision Speed	Moderate	Fast	Improved timeliness
Confidence in Outcomes	Variable	High	Greater assurance

Table 4 reveals how the structure of the models before and after the use of AI changed between the traditional and data-driven dimensions. Recognition of reliance on data-driven models is characterized by higher rationality, more diversified points of view on the problem in question, more information, and faster time to decide. More importantly, stakeholders are more confident in the results obtained from reason and data-based systems.

4.3 Faculty and Staff Perceptions of AI Tools

In this section, the authors aim to present an insight into the attitude of the faculty and the staff of XYZ University concerning the implementation of AI tools in strategic management decisions. It was carried out as a survey aimed at measuring the perceived usefulness and user friendliness of AI tools as well as establishing the training and development requirements that can facilitate the effective use of AI tools.

4.3.1 Survey Results on the Perceived Usefulness and User-Friendliness of AI Tools

After using the AI tools, the participants were required to fill in a Likert scale ranging from 1 (Strongly Disagree=1) to 5 (Strongly Agree=5) to rate the usefulness and user-friendliness of the AI tools. The results are displayed in Table 5.

Table 5: Perceptions of AI Tools

Statement	Mean Score	Standard Deviation	Percentage Agreeing (4 or 5)
AI tools are useful for enhancing decision-making	4.20	0.85	76%
AI tools are user-friendly and easy to navigate	3.45	1.10	52%

These results indicate that the perceived usefulness of AI tools for faculty and staff in the decision-making process has a positive mean score of 4.20. This implies a high recognition of the potential advantages of Intelligent Applications at the strategic level. Nonetheless, the overall ease based on the mean of 3.45 signified that participants were only moderately satisfied with the tools, and there was an unsatisfactory relation when it came to the interface of some of these tools.

4.3.2 Differences in Perception Based on Roles and Responsibilities within the University

There were mixed and divergent views towards the concept and usage of AI tools depending on the position and task of the respondent in the university. However, faculty members, who are mostly involved in teaching and research, seemed to be more satisfied with the ability of AI tools to enhance learning (72% agreed or strongly agreed as against 61% of the administrative staff). On the other hand, administrative staff found the AI tools helpful in completing routine tasks; 78% found it useful compared to 67% of the faculty staff.

These differences are best illustrated in Figure 2, where despite the overall similarity in the perception of 'Usefulness' while at work, the emphasis is slightly shifted based on 'Occupational tasks'.

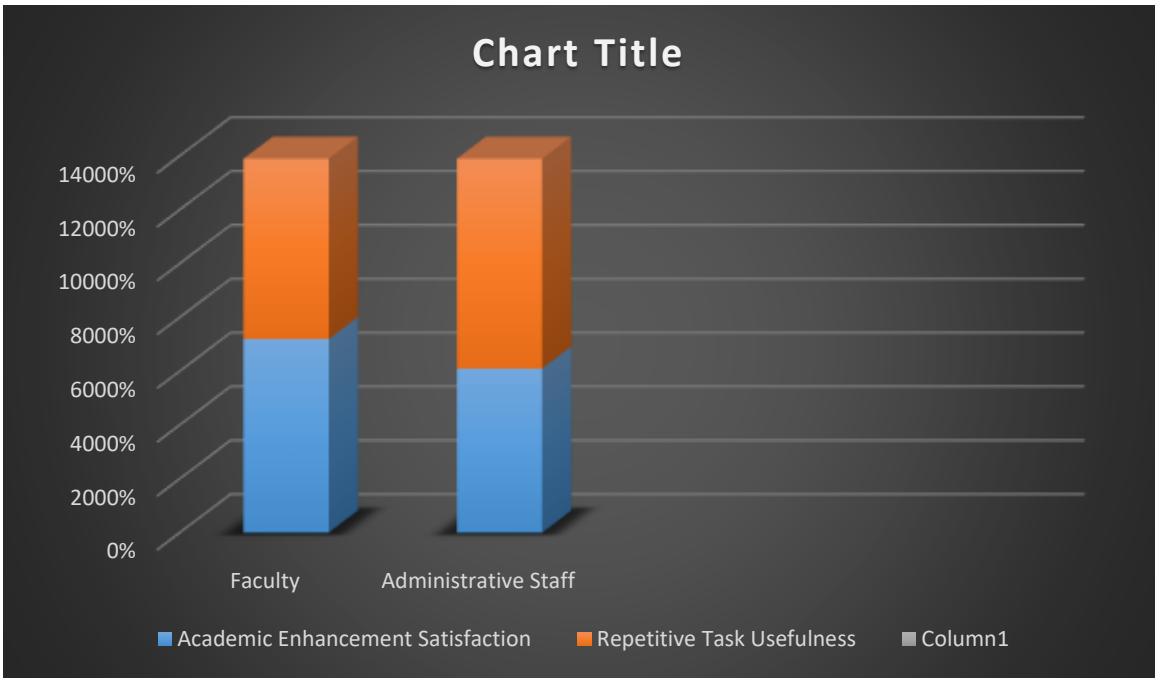


Figure 2: Role-Based Perception of AI Tool Usefulness

Figure 2 captures the self-reported satisfaction of the faculty and the administrative staff regarding the usefulness of AI tools in academics and administration. These points have stressed the significance of having AI tool features and functionalities that are distinct for each role so as to increase perceived value for all.

4.3.3 Training and Development Needs Highlighted by Faculty and Staff

The survey also aimed to find out the general training and development requirements of employees. Concerning the participants' data, participants were asked questions to establish what they felt would require improvement, either in terms of support or training. The responses are summarized in Table 6 as follows.

Table 6: Training and Development Needs

Training Area	Percentage Requesting Training
Advanced AI Tool Usage	68%
Data Interpretation and Analysis	55%
Integration of AI in Strategic Planning	61%
Basic AI Principles	40%

Self-training in advanced utilization of AI tools was seen as necessary by 68% of the respondents, while the integration of AI as a strategic plan was seen by 61% of the respondents. This points to an urge not only to apply AI tools proficiently but also to integrate AI strategies as a part of larger peculiar and generalized structures. However, the results also indicate a need for training in interpreting results (55%), which means tools exist, but useful analysis is still a problem.

4.4 Challenges and Risks Associated with AI Integration

This section discusses the difficulties and threats emerging from the study on the possibility of implementing AI in strategic planning at XYZ University, Saudi Arabia. Data were collected qualitatively by selecting participants through interviews and focus group discussions with the faculty, administrative staff, and IT personnel.

4.4.1 Ethical Considerations and Data Privacy Concerns in AI Usage

The increasing integration of AI technology in strategic decision-making raises ethical and data privacy concerns at XYZ University. The level of concern related to AI's ethical issues was determined by a survey that was taken among the officials of the college, including the administrative staff and the faculty members.

Table 7: Degree of Concern Regarding Ethical and Privacy Issues

Level of Concern	**Percentage of Respondents (%)**
Very Concerned	45
Moderately Concerned	35
Slightly Concerned	15
Not Concerned	5

From Table 7, it can be seen that 45% of the respondents are very much concerned about ethical issues, while 35% are moderately concerned. Such a high level of concern means that XYZ University must develop clear ethical standards and strict policies regarding the protection of data and the proper usage of AI.

4.4.2 Resistance to Change and the Need for Stakeholder Buy-In

AI implementation may experience resistance from some stakeholders in the university because there is a rigid prescription to conventional methods, and people may not recognize the advantages of the new technology.

This included cultural resistance whereby some of the faculty and administrative post holders were resistant to change by resisting the use of other decision-making models. They expressed the desire to maintain old fashioned ways of doing things and a core disbelief in reliance on artificial intelligence. Furthermore, there is low awareness of AI technologies and what they are capable of doing, a situation that creates resistance to their adoption. There was a lot of focus on the need to adopt integrated programs for the promotion of artificial intelligence literacy among all the participants. For any form of AI deployment to work, major stakeholders cannot be left out in the process. Using such systems would require additional workshops and forums for people to appreciate and embrace the change.

Table 8: Resistance to Change and Solutions

Resistance Factor	Frequency Reported	Proposed Solutions
Cultural Resistance	High	Development of change management programs
Lack of Understanding	Medium	Implementation of AI literacy and training programs
Stakeholder Engagement	High	Establishment of workshops and consultation forums

4.4.3 Risk of Dependence on AI for Critical Decision-Making Without Human Oversight

One of the main threats to integration with AI is dependency on technology for critical processes. Consequently, the study evaluated the perceived risk of dependency on AI systems among decision-makers at XYZ University.

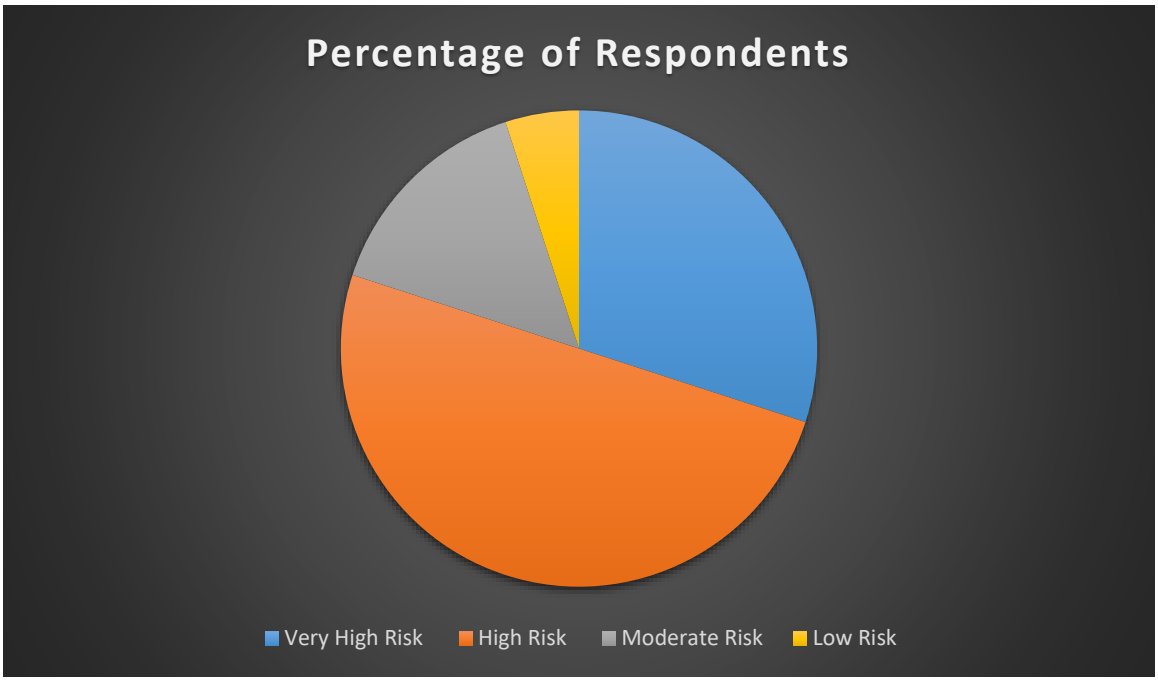


Figure 3: Perceived Risk of Overreliance on AI

The findings reveal that 50% of the participants have a great concern about the risk of using AI, while the other 30% have a very high concern about the risk of overreliance on the use of AI. The prevalence of these perceptions indicates the imperative need for policies guaranteeing human input to decision-making mechanisms. This means that for many years, people should focus on the use of artificial intelligence as a tool and not an actor.

4.4 Qualitative Analysis

Several main findings were obtained from the qualitative research study with faculty, administrative staff, and key decision-makers in the university through in-depth interviews and focus group discussions.

4.4.1 Enhanced Data-Driven Decisions

One of the most recurrent themes identified in the analysis of the qualitative data was the significant improvement of the organizational decision-making processes as a result of the integration of AI. All of them often described how different AI systems, with an emphasis on big data analytics and decision support systems, helped the university to make effective use of huge amounts of academic and administrative data.

Some of the interviewees expounded on the aspect of AI as being effective in revealing patterns that had earlier been unnoticeable. One senior faculty member stated,

> "Before AI, we relied heavily on intuition and fragmented data. Now, we can track trends in student performance, enrollment patterns, and even funding flows with remarkable accuracy."

This ability to identify trends empowers the university to act preventatively as opposed to acting like a respondent.

The macro strategic importance of AI was explained by another participant of the study, who belongs to the administration personnel:

> "In our strategic planning meetings, AI-derived insights have become invaluable. We can predict enrollment numbers for the next five years, assess potential resource constraints, and even model the impact of new academic programs. This foresight was unheard of in the past."

The idea that AI has helped improve the confidence placed in strategic decisions was highlighted by the participants. One director of academic affairs commented:

> "Decisions backed by AI insights are not just guesses. They are grounded in a robust analysis of present and historical data. This shift has brought a new level of confidence to our strategic initiatives."

Additionally, participants emphasized how AI has made data access more accessible and allowed for greater involvement in decision-making. One faculty member stated,

> "With AI, we have dashboards and tools that allow us to visualize data trends ourselves, without needing a data science background. This means more voices can be heard in discussions about strategic directions, as decisions are no longer the domain of just a few individuals at the top."

These more general concepts were demonstrated by XYZ University's AI application examples. Participants mentioned an AI-powered student advising system as a way to increase student achievement and retention. According to an academic adviser,

> "The AI system analyzes academic records, engagement metrics, and even socio-economic factors to identify students at risk of dropping out. This allows us to intervene early with personalized support plans. It's a game-changer."

Additionally, a representative of the university's finance department stated,

> "AI tools have streamlined our budgeting processes by forecasting departmental needs and spotting inefficiencies. There was an instance where AI highlighted a consistent underspend in a particular department, which led us to reallocate resources more effectively."

4.4.2 Improved Operational Efficiency

The application of AI to ordinary administrative duties at XYZ University has resulted in a notable improvement in operational efficiency, which is one of the study's main conclusions. All of the participants agreed that AI technologies have had a revolutionary effect on automating a variety

of administrative tasks, including scheduling, allocating resources, and admitting students. Administrative employees now have less work to do thanks to automation, freeing them up to concentrate on more valuable and strategic tasks.

One of the administrative staff members said,

> "AI has been a game-changer for us. Tasks that used to take hours, such as scheduling and planning, can now be done in minutes with just a few clicks. This has freed up time for staff to engage in more meaningful work that requires human expertise."

The integration of AI has not only cut the time and effort from the staff's side but also contributed to a less erroneous business procedure, making the organization more optimized. This was underscored by another participant did this by narrating,

> "In the past, prior to the integration of AI in our operations, we would sometimes make mistakes such as; duplications or wrong entries, and this would lead to confusion or even delays. AI, for instance, has now ensured the reduction of these kinds of mistakes, and making our operations much more efficient."

Furthermore, it was common for participants to report that the improvements made due to the use of AI in increasing the success of students' admission were important. An admitting faculty member said:

> "We are able to sort through thousands of applications within minutes and hours due to the advanced use of AI algorithms in recruiting talents that complements different organizations. This has enhanced the quality of our student admission and the process has been standardized and made more ethical."

Yet another area of greater operational effectiveness is the capacity to make changes in response to new conditions. For instance, when the COVID-19 situation broke out, the university was able to deploy AI to address the issues of switching to online lessons and e-resources. An interviewee from the IT department said:

> "Thanks to AI, we could quickly increase our availability and resources to match the needs of online learning. It played a huge role in ensuring that we provided operational continuity during those formidable circumstances."

However, certain participants also reported a certain level of caution about the complete reliance on the use of AI for operations optimization. They pointed out the necessity for an appropriate balance between autonomy in AI and supervision to make conclusions quite relevant to the mission of the university. This was captured by an administrative leader who stated:

> "Everyone knows today AI is incredibly powerful, but one has to recall the simple truth that AI is here just to help us, not take our jobs. It is still up to our own judgment in some cases where AI seems to be not perceiving the context properly."

4.4.3 Increased Agility in Strategic Planning

Among the usual questions, one of the most important questions that arose during the interviews was the concept of competitive advantage that appeared due to the integration of AI technologies into an organization’s strategic management. Furthermore, the participants also jointly outlined that AI is needed to enable the university to quickly respond to the changes that take place in the operating environment. The AI tools where the use cases were identified in terms of strategy scenarios and simulations were identified to encompass the highest relevance level due to the dynamic nature of the environment where strategies can be adapted at a faster pace.

One particular endeavour was fleshed out by a particular faculty member as follows:

> "The AI systems allow us to run multiple scenarios almost instantaneously. This capability was essential during the pandemic when we had to adjust our enrollment strategies and academic offerings on the fly."

The university's capacity to swiftly adapt to outside demands is improved by this quotation, which highlights the real-time decision-making assistance that AI technologies provide.

Additionally, an administrative staff member pointed out,

> "AI has not only improved the speed of our decision-making but also the quality. We are able to predict trends and adjust our resources accordingly, which is something we struggled with before."

This underlines the efficiency and anticipatory nature of AI as a factor for well-grounded and effective organizational planning.

Decision-makers also included their information, the senior manager said,

> "Before AI, strategic planning felt like navigating in the dark. Now, it's as if we have a compass that not only shows the current situation but predicts the storms ahead, allowing us to change course proactively."

This metaphor sums up the way that AI brings better detection and preventive strength to strategic planning initiatives.

4.4.4 Enhanced Faculty Support and Student Engagement

With the help of technologies and learning facilitators embedded with AI, the faculties of XYZ University have gained lots of support, and students have become more interactive. Employees also stated that AI software is now critically crucial to their academic and administrative work, providing support in emerging research, grading, teaching methodologies, and programming the learning process for every learner.

The faculty participant associated with this university commented that:

> "The AI tools we use have completely changed how we approach grading and providing feedback. It's no longer a tedious task but rather an opportunity for deeper engagement with student work. These technologies flag patterns in student submissions that help us tailor our feedback and intervention strategies."

The faculty pointed out that due to the efficient use of technology, especially in grading, time has been regained from such processes, leaving more time for interaction with the students and guided mentoring. This not only increases efficiency but also increases the quality of education that teachers provide to students.

Also, students have experienced the advantages of using artificial intelligence to create learning schemes that depend on the learner's speed and style. A faculty member remarked,

> "With AI, I can design learning programs that are truly customized. Students who may struggle with traditional teaching methods get a chance to learn at their own pace, which is incredibly rewarding to see."

Similar views were expressed by the administrative staff: In addition to learning, these AI technologies encompass administrative work pertinent to the learning processes.

> "Our AI systems help us track student progress and engagement levels more closely than ever before," noted one administrator. "This data helps us to intervene early if a student shows signs of struggle, ensuring timely support that is tailored to their needs."

There is no doubt that the support provided to the faculty and engagement of students in XYZ University through AI tools has come with a positive impact. AI continues to help reduce the load of faculty members and support flexible environments that remain beneficial to students; this makes it helpful in enhancing the success rates of the academic sector and the basic satisfaction of the professors and students. Integrated application of these technologies should thus remain a strategic focus for future and current academic activities at XYZ University.

5. Discussion

In the last few years, the application of AI in strategic management, in general, and in making strategic decisions, in particular, has become the subject of vast interest in different fields, including the field of higher education. The current paper is part of the research efforts on the effects of AI on decision-making processes since it focuses on XYZ University, a university in the Kingdom of Saudi Arabia. The implications of this study build on, yet are unique from, similar literature, providing specific detailed information about the use of AI technologies in higher education.

Based on the study, it is evident that AI has a radical effect on strategic decision-making at XYZ University; this is achieved by improving the decision processes and their speed and accuracy. This is in line with the previous research by Al-Surmi (2022) that pointed to similar augmentation values that come with the integration of artificial intelligence into decision schemes in business. However, our study reveals a unique context-specific dimension: how AI tools can be applied to culturally sensitive contexts of operation, like the KSA environment. This discovery quiets down

the frequent Europe-America approach used in most prior research while stressing the need to take cultural factors into account when deploying and using AI.

Additionally, this research establishes that AI is a decision-enabling tool and, at the same time, a driver of organizational culture transformation at XYZ University. Ayoub (2016) pointed out that the use of AI gives rise to changes in power relations and dynamics at the organizational level. Our study also confirms this by observing a change in decision-making cultures that are more data-oriented; this is disruptive to the formal structure of organizations. This transition, however, brings managing change, which involves the resistance which may come from the staff who are used to traditional decision making approaches, which is covered by Bag et al. (2021).

One interesting difference between our research and prior literature is the acknowledgment of ethical and privacy issues related to AI in strategic planning. Bhat (2021) spoke about the problems in using AI, such as controversy about bias and data privacy. At XYZ University, such concerns were highly visible because, as has been noted, there was a growing consciousness about ethical norms in learning institutions in Saudi Arabia. This raises questions as to how Western educational institutions can support powerful frameworks and policies to ensure ethical considerations, which is a topic that has received insignificant scholarly attention compared to theoretical and empirical journals.

In the vein of stakeholder management, our study confirms Chernov's (2020) call for engaging multiple actors in processes underlying the application of AI systems. The implementation of AI at XYZ University involved cross-collaboration between administrative, academic, and IT departments, making decision-making broad and balanced.

Overall, our study aligns itself with the current literature concerning the overall benefits of AI in decision making, but it offers greater insights into the need for continued training and development activities to support AI implementation. This corroborates with findings by (Dickson, 2014) but adds more weight to the centralization of implementing the use of IT in staff and students' learning as a foundation for sustainable practice.

6. Conclusion

This research work has examined the emerging phenomenon of AI-strategic decision making, focusing on XYZ University in Saudi Arabia. With the increasing adoption of AI technologies by institutions worldwide in an effort to transform operations and decision-making, our study sought to shed light on the extent to which these tools are affecting decision making at XYZ.

The study reveals that the use of AI improves the strategic decisions made by XYZ University by making the decisions efficient, accurate, and timely. The adoption of technologies such as data analytics and machine learning has helped the university enhance its utilization of resources, student service delivery, and research. Progress in AI has made it possible for decision makers to analyze large chunks of data and come up with solutions that were previously unimagined.

Furthermore, the study also shows how AI is enabling organizations to embrace values that support the use of data in their operations. This change is due to the higher objectivity and the elimination

of prejudice that were previously instrumental in strategic decision making. However, the concept of integration with AI is not without its problems. This requires a significant expenditure on technology and training of both faculty and learners on the optimal ways of leveraging such opportunities.

Through this study, the author establishes that, although AI has the capacity to revolutionize many aspects, institutions such as XYZ University should adopt a balanced approach. In this context, ethical issues like privacy issues and bias in algorithms have to be given the core and central attention in the strategies for deploying AI. That is why constant examination and improvement of one's strategy is crucial when dealing with constantly changing technologies related to AI.

Thus, at XYZ University, AI is transforming the strategic decision-making environment and providing opportunities for career growth. Thus, by approaching AI implementation with consideration of all its possible impacts, the university can establish itself as an innovator in education and set up an example for other academic institutions both in the region and around the world. Other studies should further examine the effects of applying AI in higher learning institutions over a prospective time frame and how to prevent the negative consequences of adopting advanced technology on the achievement of the institutions' goals and ideals.

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