# The Influence of AI-Driven Marketing Analytics on Strategic Decision-Making in Private Educational Institutes in Sri Lanka: Moderator Role of Organisational Culture

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**ABSTRACT**

**Purpose**: This study explores the influence of AI-driven marketing analytics on strategic decision-making processes in Sri Lankan private universities. AI-driven analytics enable private education institutions to offer insights for targeted student recruitment campaigns and optimized resource allocation.

**Design/methodology/approach**: A quantitative methodology was adopted, employing a deductive approach to test hypotheses related to AI adoption and its impact on strategic decision-making. The study focused on 225 managers, decision-makers, and administrative staff involved in marketing and decision-making processes within private universities. Data were collected through a structured questionnaire survey, analyzed using SPSS v26, and validated through reliability, regression, and moderator analyses.

**Findings:** There is a positive and statistically significant impact of AI-driven marketing analytics on strategic decision-making effectiveness. Organizational culture emerged as a critical moderator, influencing how AI tools are utilized. Institutions with innovation-oriented cultures were found to adopt AI technologies more effectively, promoting adaptability, experimentation, and collaboration.

**Originality:** This study uniquely integrates organizational culture as a moderating factor, providing new insights into how innovation-oriented cultures enhance AI adoption and utilization. By addressing gaps in existing research on AI applications in educational marketing, this study offers a novel framework for leveraging AI tools to optimize decision-making in higher education institutions.

**Implications**: The study highlights the importance of fostering data-driven and innovation-focused cultures within universities to maximize AI adoption. Recommendations include investing in AI tools, staff training programs, and ethical data governance frameworks. Additionally, collaborative decision-making models integrating AI insights with human expertise are suggested to optimize strategic outcomes.

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## Introduction

In recent years, Artificial Intelligence (AI) and marketing analytics have emerged as transformative tools (Eboigbe et al., 2023). AI decision-making tools are increasingly used in different industries due to their effectiveness. When referring to the education sector, these technologies offer immense opportunities for the administrators of universities to make effective data-driven decisions (Teng et al., 2023). The education sector is becoming highly competitive with higher enrollments (Gryshchenko et al., 2021). On the other hand, student engagement is also intensified. AI-driven analytics provide institutions with the ability to process vast amounts of data and predict trends which help them to make more accurate and timely decisions (Alsharari, 2018). Globally, organizations across sectors are increasingly relying on AI to enhance marketing efficiency (Davenport et al., 2020). AI-based decision-making allows management to allocate resources effectively (Alapati & Valleru, 2023). Educational institutions have begun to harness AI-powered tools. The main AI tools used in education decision making are predictive modeling, machine learning algorithms, and real-time data visualization. These are usingto refine their marketing strategies (Abubakar et al., 2019). When educational institutes use AI for their marketing decision making, they can have the opportunity to target specific demographics and, personalize communication with prospective students (Nieto et al., 2019).

The higher education sector in Sri Lanka is playing a vital role in developing talent for economic development (Wickramasinghe, 2018). Most of the higher education institutes, including both government and private universities, offer a range of programmes for the younger generation. These institutes offer diplomas, undergraduate and postgraduate qualifications for the candidates. The higher education industry has higher competition to attract more students. They target young students and professionals for their qualifications following different marketing channels such as social media, television, printed media, email marketing(Perera et al., 2023). Therefore, effective marketing is necessity for these educational organisations to stay competitive in the market. Especially private universities are highly dependent on attractive marketing campaigns to attract students. The current study is focusing on strategic decision making related to educational marketing. Strategic decision-making in educational marketing refers to the process of making informed decisions on key marketing administrative tasks , namely, student recruitment, resource allocation, and campaign design. There is a growing trend among these institutes to shift from traditional marketing to data-driven strategies. There is limited empirical studies on AI use in marketing within the education sector in Sri Lanka. However, local education institutes made digital transformation efforts to integrate AI (Kasthuriarachchi et al., 2018). Organizational culture remains a critical factor influencing how effectively AI tools are utilized for decision-making.

Sri Lanka as a developing nation, it gradually adopting AI technologies in different fields, including education (Seneviratne et al., 2020). Research proves that the integration of AI into the educational field in Sri Lanka is still lagging behind (Aflal et al., 2024). AI-driven

tools have the potential to optimize service offerings and engage with stakeholders (Henadirage & Gunarathne, 2024). However, due to infrastructure limitations, lack of expertise, and resistance to change among educational stakeholders, the adoption is slower.

In this competitive landscape, it is important to make data-driven decisions based on AI which can offer a competitive advantage for Sri Lankan educational institutions (Perera & Iqbal, 2021). AI-driven decision-making helps education institutes to identify trends in student behaviour, and regional demand (Abubakar et al., 2019). This can help these institutions to develop more targeted recruitment campaigns. This will increase the enrollment rates and reduce acquisition costs. Well-designed marketing strategies enhance the institution's brand image (Da Costa et al., 2018). Therefore, these institutions can attract high-quality students and partnerships, which ensure sustainable growth. However, when reviewing literature, the studies related to AI integration in marketing decision making in Sri Lankan education sector is lacking. Most of the studies are done to analyse the effectiveness of AI tools in teaching and learning processes (Perera & Uduwela, 2024; Ediriweera et al., 2025). Another set of Sri Lankan studies have focused on challenges in adopting AI in education settings (Henadirage & Gunarathne, 2024; Rajapakse et al., 2024). There is a clear literature gap in AI usage for strategic marketing decision making in Sri Lankan universities. Further, the integration of organizational culture in this framework is further lacking in previous studies. This study answers the research question of "What is the impact of using AI-driven analytics on strategic marketing decisions in Sri Lankan education institutions?". The main objective of this research is to identify the impact of using AI-driven analytics on strategic marketing decisions in Sri Lankan education institutions.

## Literature Review

### *Effectiveness of Strategic Decision-Making*

Strategic decision-making is a critical process through which organizations determine their long-term direction, allocate resources effectively, and establish priorities to achieve their goals (Fuertes et al., 2020). It involves analyzing complex information, weighing alternatives, and making choices that have significant implications for an organization's performance and sustainability (Ghasemaghaei et al., 2018). In organizational management, strategic decision-making extends beyond day-to-day operational tasks. It focuses on high-level decisions that shape the future trajectory of an institution, such as market positioning, resource investments, and competitive strategies (Alhawamdeh & Alsmairat, 2019; Alvarez-Milán et al., 2018; Namany et al., 2019). These decisions are typically data-driven, requiring a deep understanding of internal capabilities, external opportunities, and emerging trends. When referring to strategic decision-making in marketing, it involves identifying target audiences, allocating budgets across multiple channels, and analyzing market trends and consumer behavior (Hosen et al., 2024). Therefore, scholars have a similar perception toward strategic decision making due to its positive contribution to organizational performance.

Strategic decision-making plays a pivotal role in shaping the trajectory of organizations, especially in dynamic and competitive environments (Hera et al., 2024). Calabretta et al. (2017) highlight the interplay between intuition and rationality as central to strategic decision-making. Using a paradoxical lens, their research underscores the inherent pressure between these two approaches. This highlights that that effective decision-making often requires integrating intuitive insights with rational practices. This integration fosters outcomes that align with both immediate situational demands and long-term organizational goals. Abubakar et al. (2019) explore the relationship between decision-making styles and organizational performance, emphasizing the role of knowledge management as a mediating factor. Their framework suggests that collaborative organizational practices, T-shaped skills, and IT support enhance knowledge creation processes, which in turn influence strategic decisions. Troisi et al., (2020)'s exploration of growth hacking within the B2B segment emphasizes the transformative role of Big Data analytics and cognitive computing in reshaping marketing decisions. The Growth Hacking model enables firms to exploit opportunities offered by Big Data and cognitive computing which foster innovation, customer relationship management (CRM), and product development (Bargoni et al., 2024). The study's findings reveal that data-driven marketing is not merely a tool for enhancing efficiency but also a strategy for sustained competitive advantage, enabling firms to make informed decisions based on continuous data-driven insights. Therefore, researchers highlighted the contribution of big data and AI in strategic decision making in marketing operations (Bargoni et al., 2024; Troisi et al., 2020).

Even if several scholars have studied strategic decision making related to marketing, the studies related to educational marketing is not captured. Therefore, there is a significant theoretical and empirical gap in educational marketing decision making using AI. Several studies being done to analyse the role of AI in improving strategic decision making. Big data offers a transformative potential by enabling organizations to collect, process, and analyze large amounts of information through the latest technologies (Vassakis et al., 2018). This capability shifts decision-making from intuition-based judgments to evidence-based strategies, where data becomes the foundation of managerial and operational decisions (Tiwari, 2024). AI serves as a critical enabler in this framework, allowing businesses to derive actionable insights from data by automating complex analytical tasks, recognizing patterns, and predicting future trends (Maddireddy & Maddireddy, 2021). AI enhances decision-making effectiveness by integrating big data into every layer of the organization, starting with the revision of traditional business information systems (Narne et al., 2024)Adopting AI-powered analytics can help firms organize and explore data more efficiently. It ensures that valuable information is accessible and actionable.

AI enables organizations to process vast amounts of data quickly and accurately. Cyber-Physical Production Systems (CPPSs), as discussed by Andronie et al., (2021) highlight how AI-driven analytics and IoT sensing networks facilitate real-time monitoring and decision-making. By integrating deep learning and sensor networks, CPPSs achieve

greater interoperability and flexibility, empowering organizations to optimize operations significantly. Research highlights that balancing AI's capabilities with human judgment is critical, especially in decisions requiring ethical or intuitive reasoning (Duan et al., 2019). The interaction between AI systems and human decision-makers must be seamless to enhance effectiveness. Further, the accuracy and reliability of AI outputs depend heavily on the quality of input data (Patchipala, 2023). AI finds diverse applications across industries to support strategic decision-making. According to previous studies, IoT-enabled AI systems enhance operational efficiency by providing actionable insights into production processes and logistics. These systems enable agile decision-making to adapt to changes in real-time (Hicham et al., 2023).

Huang & Rust, (2021) further elaborate on integrating AI into strategic marketing through a three-stage framework that combines mechanical AI, thinking AI, and feeling AI. Mechanical AI automates repetitive functions, such as data collection and standardization, enhancing operational efficiency. Integrating AI into strategic decision-making offers a structured pathway to optimizing marketing efforts. In the research stage, AI supports the segmentation, targeting, and positioning (STP) process by providing granular insights into market dynamics and customer behavior. Stone et al. (2020) emphasize the need for focused research into the application of AI in strategic marketing decisions. While operational AI applications like customer segmentation and campaign automation are well-studied, strategic decisions, such as long-term branding, market positioning, and resource allocation, remain underexplored.

### *AI-Driven Marketing Analytics*

The use of Artificial Intelligence (AI) for analysis involves leveraging advanced algorithms and machine learning models to process, interpret, and derive insights from large and complex datasets (Machireddy et al., 2021). AI's analytical capabilities are transformative across industries due to their precision, scalability, and ability to uncover patterns and trends that may not be immediately apparent to humans (Nama et al., 2023). AI empowers data-driven systems to move beyond reactive approaches to proactive, self-aware, and predictive analytics (Raghunath et al., 2023). As Kibria and Kibria et al., (2018) explain, next-generation wireless networks benefit from AI's ability to exploit large datasets, enabling intelligent, cost-effective operations systematically. AI-driven tools predict future trends, identify patterns, and provide prescriptive solutions for optimization and decision-making. AI handles massive datasets efficiently through advanced algorithms like Machine Learning (ML), which evolve as they process more data (Haleem et al., 2022). This scalability is essential in diverse domains, from telecommunications to finance, where traditional data analysis tools fail to meet modern complexities. By using data from various sources, AI systems provide unified analyses. As discussed by Paschen et al. (2019) foundational AI frameworks transform raw data into actionable information by leveraging interconnected components.

The current study is focused on AI based marketing decision making. AI transforms customer experiences by personalizing interactions based on insights derived from

customer behavior and preferences (Boppiniti, 2022). As literature highlight, AI algorithms analyze consumer data to determine optimal content, timing, and channels for targeted marketing (Babatunde et al., 2024). This personalization enhances customer satisfaction and loyalty. Further, research highlights that AI tools can analyse the performance of competitors' campaigns, providing actionable insights into their strategies and customers' expectations (Iyelolu et al., 2024; Rahman et al., 2024). This data informs businesses about market positioning and potential areas for differentiation. AI employs Natural Language Processing (NLP) to assess consumer sentiments and electronic word-of-mouth. Mustak et al., (2021) identify consumer sentiment analysis as a dominant research theme for understanding market trends and customer feedback. Further, AI's predictive models evaluate marketing strategies, improving campaign performance and resource allocation. Artificial Intelligence (AI) for analysis significantly enhances the effectiveness of strategic decision-making by enabling organizations to process large and complex datasets, identify patterns, and generate actionable insights with high accuracy and efficiency. AI-driven tools also enable businesses to evaluate competitors' strategies, assess consumer behavior, and develop personalized marketing campaigns, leading to more informed and targeted decisions (Paschen et al., 2019; Mustak et al., 2021). Furthermore, AI's ability to integrate diverse data sources and perform real-time sentiment analysis empowers decision-makers to adapt quickly to dynamic market conditions. Based on these evidences, the following hypothesis is developed;

*H1: There is a significant impact of the AI-Driven Marketing Analytics on the Effectiveness of Strategic Decision-Making.*

### *Organizational Culture*

Organizational culture refers to the shared values, beliefs, norms, and practices that shape the behavior and attitudes of individuals within an organization (Di Stefano et al., 2019). It serves as the foundation for how employees interact, make decisions, and approach their work (Elsbach & Stigliani, 2018). Organizational culture influences communication styles, leadership approaches, and decision-making processes, creating a collective identity that guides the organization's operations and strategic direction (Akanji et al., 2020). A strong organizational culture promotes alignment with organizational goals, fosters employee engagement, and enhances performance, while also enabling effective responses to challenges and opportunities (Ababneh, 2021). Innovation is a part of organizational culture (Tian et al., 2018). It emphasizes creativity, experimentation, and adaptability which fosters an environment where employees are encouraged to generate new ideas, take risks, and challenge the current situation. It promotes a forward-thinking mindset that values learning, continuous improvement, and flexibility in problem-solving. Organizations with a strong innovation-oriented culture prioritize research and development, invest in emerging technologies, and support collaborative efforts to drive breakthroughs. Therefore, it is clear that organizational culture is an important component of continuous improvement in any organization.

This study, done by Cao et al. (2021), emphasises that managers' attitudes and personal concerns about AI are crucial for its adoption. The findings highlight the importance of favourable facilitating conditions to alleviate concerns and enhance AI acceptance. Hence, it can be argued that a culture that promotes innovation, supports AI use, and reduces personal concerns can positively influence the relationship between AI use and decision-making effectiveness. The study done by Chaudhuri et al., (2024), similar to the findings of Cao et al. (2021), demonstrates that a data-driven organizational culture significantly influences product innovation and process improvement, which ultimately enhance overall performance. Therefore, it is clear that organizations with a data-driven culture are better equipped to adapt to AI tools and leverage their potential for strategic outcomes. AI-based decision-making algorithms differ from human decision-making, particularly in terms of interpretability, speed, and replicability according to Shrestha et al., (2019). It proposes frameworks for combining human and AI decision-making. Therefore, it can be argued that cultures that promote collaboration between humans and AI (e.g., hybrid or aggregated decision-making structures) can maximize the benefits of AI for strategic decisions. Based on these evidence, the following hypothesis is developed;

*H2: Organizational culture moderates the relationship between AI-Driven Marketing Analytics and the Effectiveness of Strategic Decision-Making*

## Methodology

### *Research Approach*

This study follows a quantitative methodology. The objective of this study is to examine the impact of AI usage for analysis on the effectiveness of strategic decision-making. . Hypotheses were built up based on the findings from Kibria et al. (2018) and Haleem et al. (2022). Therefore, the findings are derived from established data-driven decision-making theories, AI analytics, and organizational performance. Hence, deductive approach was followed in this study. The deductive method allows for hypothesis testing using quantitative techniques, enabling researchers to validate or reject theoretical assumptions based on empirical evidence (Barroga et al., 2023). It ensures objectivity, reliability, and generalizability of findings, making it particularly effective for examining causal relationships and quantifying the impact of AI on strategic decision-making.

### *Conceptual Framework*

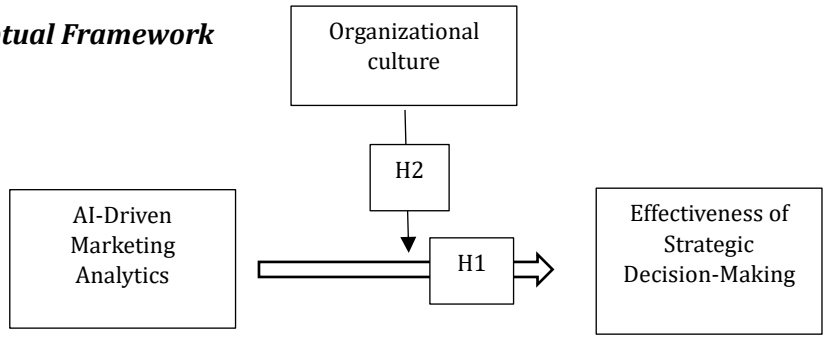


*Figure* 1. Conceptual Framework
*Source:* Developed by the Author based on prior empirical studies, 2024

## *Operationalization*

Table 1
Operationalization

| Variable | Definition | Indicators | Sources | Measurement |
|---|---|---|---|---|
| AI-Driven Marketing Analytics | The application of artificial intelligence technologies to collect, process, and analyze large datasets in order to generate actionable marketing insights | Data processing capability<br>Predictive analytics<br>Resource optimization<br>Scalability of AI systems<br>Real-time analysis<br>Personalization in marketing | (Allil, 2024; Sharma et al., 2023) | 5-Point Likert scale |
| Organizational culture | The shared values, beliefs, norms, and practices within an organization that shape employee behaviors. | Shared values<br>Strategic alignment<br>Innovation<br>Support for technology adoption<br>Human–AI collaboration<br>Data-driven decision emphasis<br>Risk-taking<br>Continuous learning | (Di Stefano et al., 2019; Shrestha et al., (2019)). | |
| Effectiveness of Strategic Decision-Making | The extent to which an organization makes high-quality, data-informed, goal-oriented, and collaborative decisions that lead to desired long-term outcomes. | Decision quality<br>Decision accuracy in marketing<br>Consumer insight utilization<br>Resource allocation efficiency<br>Alignment with long-term goals<br>Knowledge Sharing<br>Stakeholder collaboration | (Ghasemaghaei et al., 2018; Stone et al., 2020). | |

## *Population and Sampling*

The population for this study comprises managers, decision-makers, and administrative staff involved in strategic decision-making processes within private universities in Sri Lanka. These individuals are directly or indirectly using AI tools for data analysis, marketing strategies, and organizational decision-making. The study requires explicitly participants with knowledge, experience, and involvement in AI-based decision-making processes. Therefore, the purposive sampling method was used to select participants who

met these criteria, ensuring relevant data was collected (Knechel, 2019). The research focuses on AI adoption and its impact on strategic decision-making, necessitating input from experts and decision-makers rather than general staff. Purposive sampling helps target key informants who can provide valuable insights into the research questions. According to the University Grants Commission (UGC), Sri Lanka, there are more than 20 private sector universities in the Colombo District, Sri Lanka (UGC , 2024). In the context of Sri Lanka, government universities provide free education and therefore rely less on competitive marketing strategies to attract students. In contrast, private universities operate in a highly competitive environment where student enrollment directly influences institutional sustainability. Their dependence on marketing tools and data-driven strategies makes them ideal candidates to explore the research objectives. Further, the majority of private education institutions located in the Colombo district, which defined the geographical scope of the sample. The statistics of UGC reveal that there are more than 40 administrative, technical and primary staff in higher education institutions (UGC, 2022). The exact population cannot be identified due to lack of reliable statistics related to private sector universities. Based on the available data, it can be assumed that the population of primary staff (decision makers), and administrative staff are approximately 800. Based on random sampling, at 95% confidence level, the sample size was 260. However, only 225 responses were completed for the questionnaire survey.

### *Data Collection and Analysis*

Data collection was done using a questionnaire survey. 5 point likert scale was used to develop the questions under each variable. Data analysis was done using SPSS v26. Reliability and validity of the variables was tested first. Descriptive statistics, correlation analysis, regression analysis and moderator analysis were done to achieve the objectives of this study.

This study adhered to strict ethical guidelines to ensure the privacy, anonymity, and confidentiality of all participants. Prior to data collection, participants were fully informed about the purpose, objectives, and procedures of the research, and their informed consent was obtained. Participation was voluntary, and respondents were assured that they could withdraw without any consequences. Data collected was stored securely and used solely for research purposes. No personally identifiable information was recorded, and responses were anonymized to protect participants' identities.

## Data Analysis

Table 2
Demographic of the Respondents

| Factor | | Frequency | Percent |
|---|---|---|---|
| **Gender** | Male | 103 | 45.8 |
| | Female | 122 | 54.2 |
| | Total | 225 | 100.0 |

| | | | |
|---|---|---|---|
| **Age** | Below 30 | 40 | 17.8 |
| | 31 - 40 | 78 | 34.7 |
| | 41 - 50 | 87 | 38.7 |
| | Above 50 | 20 | 8.9 |
| | Total | 225 | 100.0 |
| **Experience in Higher Education sector (Years)** | Below 5 | 15 | 6.7 |
| | 5 - 10 | 35 | 15.6 |
| | 11 – 15 | 67 | 29.8 |
| | 16 – 20 | 72 | 32.0 |
| | Above 20 | 36 | 16.0 |
| | Total | 225 | 100.0 |
| **Job Role** | Senior Manager/Director | 60 | 26.7 |
| | Manager/Department Head | 58 | 25.8 |
| | Supervisor/Team Leader | 56 | 24.9 |
| | Executive/Administrative Staff | 51 | 22.7 |
| | Total | 225 | 100.0 |

Source: Data Analysis, SPSS 26 (2024)

Table II presents the demographic characteristics of the respondents. Out of 225 participants, 54.2% were female (n = 122), and 45.8% were male (n = 103), indicating a fairly balanced gender distribution. Regarding age, of respondents (38.7%) were between 41 and 50 years old, followed by 34.7% aged 31–40 years. A smaller proportion (17.8%) were below 30, and 8.9% were above 50 years. Regarding experience in the higher education sector, 32% had 16–20 years of experience, and 29.8% had 11–15 years of experience, while fewer respondents had 5–10 years (15.6%) or less than 5 years (6.7%). Notably, 16% had over 20 years of experience, reflecting a significant presence of seasoned professionals. Job role distribution shows that 26.7% held senior management or director positions, 25.8% were managers or department heads, 24.9% served as supervisors or team leaders, and 22.7% were executive or administrative staff.

Table 3
Reliability Statistics

| Variable | Cronbach's Alpha | N of Items |
|---|---|---|
| AI-driven Marketing Analytics | 0.93 | 8.00 |
| Organizational Culture | 0.95 | 7.00 |
| Effectiveness of strategic decision making | 0.94 | 8.00 |

Source: Data Analysis, SPSS 26 (2024)

Table III presents the reliability analysis of the study's variables, measured using Cronbach's Alpha, which assesses internal consistency. The AI-driven Marketing

Analytics achieved a Cronbach's Alpha of 0.93, Organizational Culture 0.95, and Effectiveness of Strategic Decision-Making 0.94. Therefore, all constructs exhibit higher reliability, ensuring the measures used are dependable and suitable for further statistical analysis.

Table 4
Validity

| KMO and Bartlett's Test | | |
|---|---|---|
| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. | | .648 |
| Bartlett's Test of Sphericity | Approx. Chi-Square | 782.693 |
| | df | 3 |
| | Sig. | .000 |

Source: Data Analysis, SPSS 26 (2024)

Table IV presents the results of the Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy and Bartlett's Test of Sphericity, which assess the validity of the data for factor analysis. The KMO value is 0.648, indicating a moderate level of sampling adequacy. According to Kaiser's criteria, a KMO value above 0.6 is considered acceptable, suggesting that the sample is adequate for factor analysis. The Bartlett's Test of Sphericity reports a Chi-Square value of 782.693 with 3 degrees of freedom (df) and a p-value of 0.000. The validity results prove that the measurements are valid for further analysis.

Table 5
Correlation Analysis

| | | Effectiveness of strategic decision-making |
|---|---|---|
| **AI-driven Marketing Analytics** | Pearson Correlation | .652** |
| | Sig. (2-tailed) | 0.000 |
| | N | 225 |
| **Organizational Culture** | Pearson Correlation | .974** |
| | Sig. (2-tailed) | 0.000 |
| | N | 225 |
| **Effectiveness of strategic decision making** | Pearson Correlation | 1 |
| | Sig. (2-tailed) | |
| | N | 225 |

****. Correlation is significant at the 0.01 level (2-tailed).**

Source: Data Analysis, SPSS 26 (2024)

Table V presents the Pearson correlation coefficients to assess the relationships between AI-driven Marketing Analytics, Organizational Culture, and Effectiveness of Strategic Decision-Making. The results reveal a strong positive correlation ($r = 0.652$, $p < 0.01$) between AI-driven Marketing Analytics and Effectiveness of Strategic Decision-Making.

Therefore, it is clear that the effective use of AI tools for data analysis and insights significantly enhances strategic decision-making processes. Organizational Culture demonstrates a strong positive correlation ($r = 0.974$, $p < 0.01$) with Effectiveness of Strategic Decision-Making, highlighting the critical role of a supportive and innovation-oriented culture in enabling effective decisions. Both correlations are statistically significant at the 0.01 level, suggesting robust relationships.

Table 6
Regression Coefficients

| Coefficients[a] | | | | | | |
|---|---|---|---|---|---|---|
| **Model** | | | | Standardized Coefficients | t | Sig. |
| | | | | Beta | | |
| **1** | (Constant) | -0.824 | 0.160 | | -5.144 | 0.000 |
| | A_D_M_A | 0.135 | 0.041 | 0.063 | 3.306 | 0.001 |
| | O_C | 1.027 | 0.021 | 0.934 | 48.788 | 0.000 |
| **a. Dependent Variable: Effectiveness of strategic decision making** | | | | | | |

Source: Data Analysis, SPSS 26 (2024)

Table VI presents the regression coefficients to evaluate the impact of AI-driven Marketing Analytics (A_D_M_A) and Organizational Culture (O_C) on the Effectiveness of Strategic Decision-Making. The results indicate that Organizational Culture (O_C) has a highly significant positive influence ($\beta = 0.934$, $p < 0.001$). This proves that promoting a supportive and innovation-oriented culture significantly improves strategic decisions. Similarly, AI-driven Marketing Analytics (A_D_M_A) also exhibits a positive and statistically significant impact ($\beta = 0.063$, $p = 0.001$), implying that leveraging AI tools for data analysis moderately supports decision-making processes and rejects the null hypothesis, H10. Although the bivariate correlation between ADMA and DM is moderately strong ($r = 0.652$), the standardized regression coefficient for ADMA in the multiple regression model is relatively low ($\beta = 0.063$, $p = 0.001$). This discrepancy suggests that much of the variance explained by ADMA may overlap with that of Organizational Culture. This indicates that while AI-driven marketing analytics do contribute to effective decision-making, their impact is modest when organizational culture is accounted for.

Table 7
Moderator Analysis

| Model Summary | |
|---|---|
| R | 0.976 |
| $R^2$ | 0.9527 |
| Mean Square Error (MSE) | 0.0027 |
| F-value | 1482.84 |

| | | | | | |
|---|---|---|---|---|---|
| | Degrees of Freedom (df1, df2) | 3, 221 | | | |
| | p-value | < 0.001 | | | |
| **Variables** | **β (Coefficient)** | **SE** | **t-value** | **p-value** | **95% CI (LL – UL)** |
| Constant | 112.4095 | 40.5051 | 2.78 | 0.006 | [32.5837, 192.2353] |
| AI-Driven Marketing Analytics (A_D_M_A) | -22.5605 | 8.1186 | -2.78 | 0.0059 | [-38.5603, -6.5606] |
| Organizational Culture (O_C) | -26.26 | 9.761 | -2.69 | 0.0077 | [-45.4965, -7.0235] |
| A_D_M_A × O_C (Interaction) | 5.4673 | 1.9557 | 2.8 | 0.0056 | [1.6131, 9.3216] |

Source: Data Analysis, SPSS 26 (2024)

Table VI presents the results of the moderator analysis conducted to examine whether Organizational Culture (O_C) moderates the relationship between AI-Driven Marketing Analytics (A_D_M_A) and the Effectiveness of Strategic Decision Making. The model summary indicates a high explanatory power with an R value of 0.9760 and an R-squared ($R^2$) value of 0.9527. It proves that approximately 95.27% of the variance in strategic decision-making effectiveness is explained by the predictors and their interaction term. The F-statistic (1482.8435) is highly significant (p = 0.0000), confirming the model's overall fit. In the coefficients table, the interaction term (Int_1) is statistically significant (β = 5.4673, p = 0.0056), indicating a moderating effect of organizational culture. Both A_D_M_A (β = -22.5605, p = 0.0059) and O_C (β = -26.2600, p = 0.0077) also exhibit significant main effects, demonstrating their individual impacts on decision-making effectiveness. The conditional effects analysis shows that at different levels of O_C, the effect of A_D_M_A remains positive and statistically significant (β = 4.7761, p = 0.0044), with confidence intervals (LLCI = 1.5037, ULCI = 8.0486) confirming the reliability of the results. The findings confirm that organizational culture significantly moderates the relationship between AI-driven marketing Analytics and the effectiveness of strategic decision-making, rejecting the null hypothesis, H20.

## Discussion

The data analysis results demonstrate that AI-driven Marketing Analytics has a positive and statistically significant impact (β = 0.063, p = 0.001) on the effectiveness of strategic decision-making. This finding aligns with existing literature that emphasizes AI's transformative role in improving decision-making processes through advanced analytical capabilities (Machireddy et al., 2021; Nama et al., 2023). AI-driven tools process complex datasets with high precision and scalability. It facilitates businesses to identify hidden patterns and predict future trends (Raghunath et al., 2023). The moderate yet significant impact of AI-driven Marketing Analytics underscores its ability to generate actionable insights for optimizing decision-making processes. As highlighted by Haleem et al. (2022), AI algorithms leverage machine learning (ML) to enhance scalability and improve performance over time by continuously processing new data. This ability to adapt and

evolve makes AI systems invaluable for analyzing market dynamics and identifying growth opportunities, contributing to better strategic alignment. Moreover, AI's capacity to unify data from multiple sources enables organizations to conduct comprehensive analyses, ensuring well-informed and context-specific decisions (Paschen et al., 2019). In addition to improving internal processes, AI-driven Marketing Analytics enhances customer experience through personalized marketing strategies based on consumer preferences and behaviors (Boppiniti, 2022). AI algorithms optimize content delivery and campaign timing, enhancing customer engagement and loyalty (Babatunde et al., 2024). These insights enable businesses to refine their strategies, creating a competitive edge through targeted marketing efforts. The ability to evaluate competitors' campaigns and identify market gaps further supports organizations in differentiating themselves and adapting to market trends (Iyelolu et al., 2024; Rahman et al., 2024).

The conditional effects analysis highlights that organizational culture (O_C) significantly moderates the relationship between AI-driven Marketing Analytics (A_D_M_A) and the effectiveness of strategic decision-making ($\beta = 4.7761$, $p = 0.0044$). This finding underscores the critical role of organizational culture in enhancing the adoption and utilization of AI tools to improve decision-making processes. Organizational culture establishes the foundation for how employees interact, adapt to changes, and utilize resources (Elsbach & Stigliani, 2018). A strong organizational culture aligns employees with organizational goals, enhances engagement, and supports strategic flexibility, making it a key enabler of AI adoption (Akanji et al., 2020). The findings align with prior research emphasizing that a culture fostering innovation and collaboration is vital for the successful implementation of AI systems in decision-making processes (Tian et al., 2018). As described by Tian et al. (2018), innovation-oriented cultures promote creativity, experimentation, and adaptability, factors that encourage organizations to adopt AI tools to streamline operations and optimize decision-making. Organizations that prioritize research and development and support the integration of emerging technologies tend to create an environment conducive to AI adoption. This aligns with findings from Cao et al. (2021), highlighting that managers' attitudes and concerns about AI technologies are pivotal for their adoption. When organizational culture fosters trust and reduces fears associated with AI, it enhances the effective use of AI in decision-making processes. Moreover, Chaudhuri et al. (2024) emphasize that data-driven organizational cultures significantly influence product innovation and process improvements, leading to enhanced performance outcomes. Organizations with such cultures are better positioned to harness AI tools effectively, enabling data-driven insights and facilitating informed decision-making. This supports the study's findings that AI tools, when embedded in a supportive organizational culture, improve the efficiency, accuracy, and scalability of decisions. Shrestha et al. (2019) argue that AI-based decision-making differs from human decision-making due to its speed, interpretability, and replicability. Therefore, organizations that promote collaborative or hybrid decision-making structures—where AI complements human judgment—can maximize AI's benefits for strategic decisions. Such hybrid frameworks encourage transparency, adaptability, and cross-functional

collaboration, ensuring AI is perceived as a tool that enhances human expertise rather than replacing it. By promoting AI readiness through training, supportive policies, and adaptive work environments, these organizations mitigate implementation challenges and drive more effective outcomes (Cao et al., 2021; Chaudhuri et al., 2024). Hence, it is clear that the data analysis confirms that organizational culture serves as a critical moderator in strengthening the relationship between AI-driven Marketing Analytics and decision-making effectiveness.

## Conclusion

The findings confirm that AI-driven marketing analytics positively improve strategic marketing decision-making. AI tools help universities to make informed decisions by identifying patterns, predicting trends, and providing actionable insights, leading to more efficient and accurate strategies. According to the findings, it is clear that Organizational culture significantly influences how effectively AI tools are utilized. A culture that encourages innovation, data-driven practices, and collaboration fosters a supportive environment for AI adoption, maximizing its impact on marketing decision-making. It is important to highlight that universities with a strong innovation-oriented culture are better equipped to adopt AI technologies. Such cultures promote experimentation, adaptability, and continuous learning, enabling organizations to integrate AI into marketing decision-making processes. This facilitates these institutes to attract more students. The analysis highlights that the combined effect of AI tools and a supportive organizational culture leads to better strategic outcomes. AI tools provide analytical insights for successful marketing campaigns, while a culture of trust, openness, and adaptability ensures that these insights are effectively utilized in practice in universities. Further, the findings prove that universities that prioritize data-driven decision-making are more likely to benefit from AI implementation. Data-focused cultures emphasize evidence-based marketing strategies which improve both performance and competitive positioning. Integrating AI tools with human judgment creates a hybrid decision-making approach that leverages AI's speed and accuracy while maintaining human oversight and flexibility. This balance helps organizations effectively respond to changing market conditions. On the other hand, it is important to note that support from leadership and management in the universities is essential for addressing concerns about AI adoption. Training, trust-building, and resource allocation are crucial in ensuring AI systems are embraced and used effectively.

## Implications

Private universities should prioritize fostering a data-driven and innovation-focused organizational culture to enhance the adoption and effectiveness of AI-driven marketing analytics in strategic decision-making. Institutions should implement faculty and staff training programs to improve AI literacy, enabling stakeholders to effectively analyze data, interpret AI-driven insights, and make informed decisions. Establishing collaborative decision-making frameworks integrating AI analytics with human expertise can optimize strategic outcomes. Leadership teams should promote trust and

transparency in AI systems by addressing data privacy, security, and reliability concerns. Additionally, private universities need to invest in modern AI tools and data management systems while maintaining ethical data governance practices to ensure compliance and protect sensitive information. Regular performance evaluations and feedback loops should also be incorporated to assess AI's impact, refine strategies, and continuously improve decision-making processes to remain competitive in the evolving education sector in Sri Lanka. This study contributes to the limited body of literature on the use of AI-driven marketing analytics in the context of Sri Lankan private higher education. It highlighted the role of AI in improving strategic marketing decision-making. The above findings provide a context-specific extension to existing research largely dominated by corporate-sector settings. The findings empirically validate the moderating role of organizational culture as a key enabler in technology adoption. University administrators should focus on nurturing a culture that supports continuous learning and data-driven practices. It can enhances the effectiveness of AI tools.

## Limitations and Future Research

However, this study was conducted in private universities. This limits the generalizability of the findings to public universities or other sectors. Therefore, future research could examine public universities and other sectors to determine whether similar patterns emerge, improving the generalizability of findings. Further, incorporating qualitative approaches such as interviews and focus groups can provide deeper insights into the practical challenges and success stories related to AI adoption in higher education.

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## References

Ababneh, O. (2021). The impact of organizational culture archetypes on quality performance and total quality management: the role of employee engagement and individual values. *International Journal of Quality & Reliability Management,* 38(6), 1387-1408. https://doi.org/10.1108/IJQRM-05-2020-0178

Abubakar, A., Elrehail, H., Alatailat, M., & Elçi, A. (2019). Knowledge management, decision-making style and organizational performance. . *Journal of Innovation & Knowledge,* 4(2), 104-114. https://doi.org/10.1016/j.sheji.2020.07.002

Aflal, S.M., Shamugarajah, S., Thiruthanigesan, K., Balasubramaniam, B., Samarakoon, U. and Ragel, R.G.. (2024). The Impact of AI-Driven Educational Transformation in

Sri Lanka's Higher Education. 223–228. https://doi.org/10.1109/icac64487.2024.10851080

Akanji, B., Mordi, C., Ituma, A., Adisa, T., & Ajonbadi, H. (2020). The influence of organisational culture on leadership style in higher education institutions. *Personnel Review,* 49(3), 709-732. https://doi.org/10.1108/PR-08-2018-0280/full/html

Alapati, N., & Valleru, V. (2023). AI-Driven Optimization Techniques for Dynamic Resource Allocation in Cloud Networks. MZ Computing Journal, 4(1). Retrieved from http://mzjournal.com/index.php/MZCJ/article/view/280/289

Alhawamdeh, H., & Alsmairat, M. (2019). Strategic decision making and organization performance: A literature review. *International review of management and marketing,* 9(4), 95. https://doi.org/10.32479/irmm.8161

Allil, K. (2024). Integrating AI-driven marketing analytics techniques into the classroom: pedagogical strategies for enhancing student engagement and future business success. *Journal of Marketing Analytics,* 12(2), 142–168. https://doi.org/10.1057/s41270-023-00281-z

Alsharari, N. (2018). Internationalization of the higher education system: an interpretive analysis. . *International Journal of Educational Management,* 32(3), 359-381. https://doi.org/10.1108/IJEM-04-2017-0082

Alvarez-Milán, A., Felix, R., Rauschnabel, P., & Hinsch, C. (2018). Strategic customer engagement marketing: A decision making framework. *Journal of Business Research,* 92, 61-70. https://doi.org/10.1016/j.jbusres.2018.07.017

Andronie, M., Lăzăroiu, G., Iatagan, M., Uță, C., Ștefănescu, R., & Cocoșatu, M. (2021). Artificial intelligence-based decision-making algorithms, internet of things sensing networks, and deep learning-assisted smart process management in cyber-physical production systems. *Electronics,* 10(20), 2497. https://doi.org/10.3390/electronics10202497

Babatunde, S., Odejide, O., Edunjobi, T., & Ogundipe, D. (2024). The role of AI in marketing personalization: A theoretical exploration of consumer engagement strategies. International *Journal of Management & Entrepreneurship Research,* 6(3), 936-949. https://doi.org/10.51594/ijmer.v6i3.964

Bargoni, A., Santoro, G., Petruzzelli, A., & Ferraris, A. (2024). Growth hacking: A critical review to clarify its meaning and guide its practical application. . *Technological Forecasting and Social Change,* 200, 123111. https://doi.org/10.1016/j.techfore.2023.123111

Barroga, E., Matanguihan, G., Furuta, A., Arima, M., Tsuchiya, S., Kawahara, C., . . . Izumi, M. (2023). Conducting and writing quantitative and qualitative research. *Journal of Korean Medical Science*, 38(37), e291. https://doi.org/10.3346/jkms.2023.38.e291

Boppiniti, S. (2022). Exploring the Synergy of AI, ML, and Data Analytics in Enhancing Customer Experience and Personalization. . *International Machine learning journal and Computer Engineering*, 5(5), 1-28. https://doi.org/https://mljce.in/index.php/Imljce/article/view/38/18

Calabretta, G., Gemser, G., & Wijnberg, N. (2017). The interplay between intuition and rationality in strategic decision making: A paradox perspective. . *Organization Studies,* 38(3), 365-401. https://doi.org/10.1177/0170840616655483

Cao, G., Duan, Y., Edwards, J., & Dwivedi, Y. (2021). Understanding managers' attitudes and behavioral intentions towards using artificial intelligence for organizational decision-making. . *Technovation*, 106, 102312. https://doi.org/10.1016/j.technovation.2021.102312

Chaudhuri, R., Chatterjee, S., Vrontis, D., & Thrassou, A. (2024). Adoption of robust business analytics for product innovation and organizational performance: the mediating role of organizational data-driven culture. . *Annals of Operations Research,* 339(3), 1757-1791. https://doi.org/10.1007/s10479-021-04407-3

Da Costa, F., Pelıssarı, A., & Gonzalez, İ. (2018). Corporate image of public higher education institutions: Relevant factors to distance learning students. . *Turkish Online Journal of Distance Education,* 19(1), 117-135. https://doi.org/10.17718/tojde.382738

Davenport, T., Guha, A., Grewal, D., & Bressgott, T. (2020). How artificial intelligence will change the future of marketing. *Journal of the Academy of Marketing Science,* 48, 24-42. https://doi.org/10.1007/s11747-019-00696-0

Di Stefano, G., Scrima, F., & Parry, E. (2019). The effect of organizational culture on deviant behaviors in the workplace. *The International Journal of Human Resource Management*, 30(17), 2482-2503. https://doi.org/10.1080/09585192.2017.1326393

Duan, Y., Edwards, J., & Dwivedi, Y. (2019). Artificial intelligence for decision making in the era of Big Data–evolution, challenges and research agenda. *International journal of information management,* 48, .63-71. https://doi.org/10.1016/j.ijinfomgt.2019.01.021

Eboigbe, E., Farayola, O., Olatoye, F., Nnabugwu, O., & Daraojimba, C. (2023). Business intelligence transformation through AI and data analytics. *Engineering Science & Technology Journal,* 4(5), 285-307. https://doi.org/10.51594/estj.v4i5.616

Ediriweera, C., Pramudika, H., & Fernando, M. (2025). Harnessing AI for Personaliszed Learning: Fostering Sustainable Educational Practices in Sri Lanka's Higher Education Sector. . *Colombo Journal of Multi-Disciplinary Research*, 9(1-2), 54-75. doi:10.4038/cjmr.v9i1-2.80

Elsbach, K., & Stigliani, I. (2018). Design thinking and organizational culture: A review and framework for future research. *Journal of management*, 44(6), 2274-2306. https://doi.org/10.1177/0149206317744252

Fuertes, G., Alfaro, M., Vargas, M., Gutierrez, S., Ternero, R., & Sabattin, J. (2020). Conceptual framework for the strategic management: a literature review—descriptive. *Journal of engineering,* 2020(1), 6253013. https://doi.org/10.1155/2020/6253013

Ghasemaghaei, M., Ebrahimi, S., & Hassanein, K. (2018). Data analytics competency for improving firm decision making performance. . *The Journal of Strategic Information Systems,* 27(1), 101-113. https://doi.org/10.1016/j.jsis.2017.10.001

Gryshchenko, I., Ganushchakâ, L., Shcherbak, V., Nifatova, Đ., Zos-Kior, Đ., Hnatenko, I., . . . Martynov, A. (2021). Making use of competitive advantages of a university education innovation cluster in the educational services market. . *European journal of sustainable development,* 10(2), 336-336. https://doi.org/10.14207/ejsd.2021.v10n2p336

Haleem, A., Javaid, M., Qadri, M., Singh, R., & Suman, R. (2022). Artificial intelligence (AI) applications for marketing: A literature-based study. *International Journal of Intelligent Networks,* 3, 119-132. https://doi.org/10.1016/j.ijin.2022.08.005

Henadirage, A., & Gunarathne, N. (2024). Barriers to and Opportunities for the Adoption of Generative Artificial Intelligence in Higher Education in the Global South: Insights from Sri Lanka. *International Journal of Artificial Intelligence in Education,* 35(1), 245–281. https://doi.org/10.1007/s40593-024-00439-5

Hera, A., Al Rian, A., Faruque, M., Sizan, M., Khan, N., Rahaman, M., & Ali, M. (2024). Leveraging Information Systems for Strategic Management: Enhancing Decision-Making and Organizational Performance. . *American Journal of Industrial and Business Management*, 14(8), 1045-1061. https://doi.org/10.4236/ajibm.2024.148054

Hicham, N., Nassera, H., & Karim, S. (2023). Strategic framework for leveraging artificial intelligence in future marketing decision-making. . *Journal of Intelligent Management Decision*, 2(3), 139-150. https://doi.org/10.56578/jimd020304

Hosen, M., Islam, R., Naeem, Z., Folorunso, E., Chu, T., Al Mamun, M., & Orunbon, N. (2024). Data-Driven Decision Making: Advanced Database Systems for Business Intelligence. *Nanotechnology Perceptions,* 20(3), 687-704.

Huang, M., & Rust, R. (2021). A strategic framework for artificial intelligence in marketing. . *Journal of the Academy of Marketing Science,* 49, 30-50. https://doi.org/https://doi.org/10.1007/s11747-020-00749-9

Iyelolu, T., Agu, E., Idemudia, C., & Ijomah, T. (2024). Leveraging artificial intelligence for personalized marketing campaigns to improve conversion rates. International *Journal of Engineering Research and Development,* 20(8), 253-270.

Kibria, M., Nguyen, K., Villardi, G., Zhao, O., Ishizu, K., & Kojima, F. (2018). Big data analytics, machine learning, and artificial intelligence in next-generation wireless networks. *IEEE* access, 6, 32328-32338. https://doi.org/10.1109/ACCESS.2018.2837692

Knechel, N. (2019). What's in a sample? Why selecting the right research participants matters. *Journal of Emergency Nursing,* 45(3), 332-334. https://doi.org/10.1016/j.jen.2019.01.020

Machireddy, J., Rachakatla, S., & Ravichandran, P. (2021). Leveraging AI and Machine Learning for Data-Driven Business Strategy: A Comprehensive Framework for Analytics Integration. *African Journal of Artificial Intelligence and Sustainable Development,* 1(2), 12-150.

Maddireddy, B., & Maddireddy, B. (2021). Cyber security Threat Landscape: Predictive Modelling Using Advanced AI Algorithms. *Revista Espanola de Documentacion Cientifica,* 15(4), 126-153.

Mustak, M., Salminen, J., Plé, L., & Wirtz, J. (2021). Artificial intelligence in marketing: Topic modeling, scientometric analysis, and research agenda. *Journal of Business Research,* 124, 389-404. https://doi.org/10.1016/j.jbusres.2020.10.044

Nama, P., Pattanayak, S., & Meka, H. (2023). AI-driven innovations in cloud computing: Transforming scalability, resource management, and predictive analytics in distributed systems. . *International Research Journal of Modernization in Engineering Technology and Science*, 5(12), 4165. https://doi.org/10.56726/IRJMETS47900

Namany, S., Al-Ansari, T., & Govindan, R. (2019). Sustainable energy, water and food nexus systems: A focused review of decision-making tools for efficient resource management and governance. . Journal of Cleaner Production, 225, 610-626. https://doi.org/10.1016/j.jclepro.2019.03.304

Narne, S., Adedoja, T., Mohan, M., & Ayyalasomayajula, T. (2024). AI-Driven Decision Support Systems in Management: Enhancing Strategic Planning and Execution. *International Journal on Recent and Innovation Trends in Computing and Communication,* 12(1), 268-275.

Driven_Decision_Support_Systems_in_Management_Enhancing_Strategic_Planning_and_Execution/links/66e25265bd20173667cacb87/AI-Driven-Decision-Support-Systems-in-Management-Enhancing-S

Nieto, Y., Gacía-Díaz, V., Montenegro, C., González, C., & Crespo, R. (2019). Usage of machine learning for strategic decision making at higher educational institutions. *Ieee Access*, 7, 75007-75017. https://doi.org/10.1109/ACCESS.2019.2919343

Paschen, J., Kietzmann, J., & Kietzmann, T. (2019). Artificial intelligence (AI) and its implications for market knowledge in B2B marketing. *Journal of business & industrial marketing,* 34(7), 1410-1419. https://doi.org/10.1108/JBIM-10-2018-0295]

Patchipala, S. (2023). Tackling data and model drift in AI: Strategies for maintaining accuracy during ML model inference. *International Journal of Science and Research Archive*, 10(2), 1198-1209. https://doi.org/10.30574/ijsra.2023.10.2.0855

Perera, A., & Iqbal, K. (2021). Big data and emerging markets: Transforming economies through data-driven innovation and market dynamics. *Journal of Computational Social Dynamics,* 6(3), 1-18. Retrieved from https://vectoral.org/index.php/JCSD/article/view/32

Perera, C., Nayak, R., & Nguyen, L. (2023). The impact of social media marketing and brand credibility on higher education institutes' brand equity in emerging countries. *Journal of Marketing Communications,* 29(8), 770-795. https://doi.org/10.1080/13527266.2022.2086284

Raghunath, V., Kunkulagunta, M., & Nadella, G. (2023). Integrating AI and Cloud Computing for Scalable Business Analytics in Enterprise Systems. *International Journal of Sustainable Development in Computing Science*, 5(3), 1-13. Retrieved from https://ijsdcs.com/index.php/ijsdcs/article/view/606/245

Rahman, J., Raihan, A., Tanchangya, T., & Ridwan, M. (2024). Optimizing the digital marketing landscape: A comprehensive exploration of artificial intelligence (AI) technologies, applications, advantages, and challenges. *Frontiers of Finance,* 2(2), 1-25. https://doi.org/10.59429/ff.v2i2.6549

Rajapakse, C., Ariyarathna, W., & Selvakan, S. (2024). A Self-Efficacy Theory-Based study on the teachers' readiness to teach artificial intelligence in public schools in Sri Lanka. *ACM Transactions on Computing Education,* 24(4), 1–25. https://doi.org/10.1145/3691354

Seneviratne, I., Perera, B., Fernando, R., Siriwardana, L., & Rajapaksha, U. (2020). Student and lecturer performance enhancement system using artificial intelligence. 3rd *International Conference on Intelligent Sustainable Systems (ICISS).* Tamilnadu, India: IEEE. https://doi.org/10.1109/ICISS49785.2020.9315981

Sharma, K. K., Tomar, M., & Tadimarri, A. (2023). AI-driven Marketing: Transforming sales processes for success in the digital age. *Journal of Knowledge Learning and Science Technology ISSN 2959-6386* (Online), 2(2), 250–260. https://doi.org/10.60087/jklst.vol2.n2.p260

Shrestha, Y., Ben-Menahem, S., & Von Krogh, G. (2019). Organizational decision-making structures in the age of artificial intelligence. . *California management review,* 61(4), 66-83. https://doi.org/10.1177/0008125619862257

Stone, M., Aravopoulou, E., Ekinci, Y., Evans, G., Hobbs, M., Labib, A., Laughlin, P., Machtynger, J., & Machtynger, L. (2020). Artificial intelligence (AI) in strategic marketing decision-making: a research agenda. *The Bottom Line Managing Library Finances,* 33(2), 183–200. https://doi.org/10.1108/bl-03-2020-0022

Stone, M., Aravopoulou, E., Ekinci, Y., Evans, G., Hobbs, M., Labib, A., . . . Machtynger, L. (2020). Artificial intelligence (AI) in strategic marketing decision-making: a research agenda. . *The Bottom Line*, 33(2), 183-200. https://doi.org/10.1108/BL-03-2020-0022

Teng, Y., Zhang, J., & Sun, T. (2023). Data-driven decision-making model based on artificial intelligence in higher education system of colleges and universities. . Expert Systems, 40(4), 12820. https://doi.org/10.1111/exsy.12820

Tian, M., Deng, P., Zhang, Y., & Salmador, M. (2018). How does culture influence innovation? A systematic literature review. Management Decision, 56(5), 1088-1107. https://doi.org/ 10.1108/MD-05-2017-0462

Tiwari, V. (2024). Role of Data Analytics in Business Decision Making. Knowledgeable Research, 3(1), 18-27. Retrieved from https://knowledgeableresearch.com/index.php/1/article/view/282

Troisi, O., Maione, G., Grimaldi, M., & Loia, F. (2020). Growth hacking: Insights on data-driven decision-making from three firms. Industrial marketing management, 90, 538-557. https://doi.org/10.1016/j.indmarman.2019.08.005

Vassakis, K., Petrakis, E., & Kopanakis, I. (2018). Big data analytics: applications, prospects and challenges. Mobile big data*: A roadmap from models to technologies,* 10, 3-20. https://doi.org/10.1007/978-3-319-67925-9_1

Wickramasinghe, V. (2018). Higher education in state universities in Sri Lanka: Review of higher education since colonial past through international funding for development. International Journal of Educational Management, 32(3), 463-478. https://doi.org/10.1108/IJEM-01-2017-0028