

Leveraging Artificial Intelligence in Real Estate Operations: Its Effect on the Quality of Experience for Real Estate Firm Employees

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Abstract

Artificial Intelligence (AI) has transformed daily life and business operations by optimizing tasks and enhancing decision-making, particularly in the real estate sector. AI is expected to improve operational efficiency, streamline processes, and refine decision-making capabilities, while also providing valuable insights and fostering personalized customer interactions. However, research highlights ongoing challenges in the industry, including negative employee experiences due to repetitive tasks and limited career advancement opportunities. This study used descriptive-correlation research to evaluate the extent of AI integration in real estate

operations and its effects on employees' technology-related experiences. The sample consists of 100 real estate practitioners in General Santos City, representing various roles such as agents, brokers, and managers. Results indicate that most respondents are young, primarily female, and possess a strong awareness of AI's relevance, preferring smartphones for technology use. The findings suggest a significant relationship between AI leveraging in real estate operations and the quality of experience, which is crucial for enhancing employee satisfaction and overall performance.

Keywords: Leveraging Artificial Intelligence, Real Estate Operations, Quality of Experience, Awareness, Skills

Introduction

Artificial Intelligence (AI) has transformed daily life and business operations by streamlining tasks and enhancing decision-making. In real estate, AI is anticipated to increase efficiency, simplify tasks, and improve decision-making. It provides valuable data, enhances property management, and fosters personalized customer experiences. Additionally, AI reduces risks, promotes sustainability, and aids real estate professionals in targeting the right customers for business growth. However, research indicates that the industry often faces poor employee experiences due to repetitive tasks, heavy workloads, limited career

growth opportunities, reluctance to embrace technology, and inadequate support. To effectively leverage AI and address these issues, it is vital to establish clear objectives for this study that explore the impact of AI on employee experiences and operational efficiencies.

The primary objective of this study is to investigate the implications of Artificial Intelligence (AI) implementation within the real estate sector, specifically focusing on how AI can enhance employee experiences and operational efficiencies. By examining the transformative potential of AI technologies, this research aims to uncover strategies that real estate companies can adopt to alleviate common workplace challenges, such as heavy workloads and limited career growth opportunities. Ultimately, the study seeks to demonstrate how effectively leveraging AI can lead to a more productive workforce, improve employee satisfaction, and drive overall business growth in the real estate industry.

Smith and Davis (2020) emphasized that real estate professionals face various challenges affecting their job performance and satisfaction. Repetitive tasks like data entry and document processing cause disengagement and decreased motivation. Anderson et al. (2019) found that heavy workloads and time constraints lead to burnout, especially in competitive markets. Additionally, a lack of career advancement opportunities combined with resistance to adopting new technologies intensifies these issues, leaving employees feeling stagnant. Walker et al. (2022) noted that insufficient support and resources also contribute to higher employee turnover.

If left unaddressed, these challenges may hinder the growth and success of real estate firms in the long term. To overcome these issues, it is essential to adopt new technologies and provide adequate support to enhance employees' skills and awareness. This study aims to evaluate the level of awareness and skills regarding AI applications among employees in selected real estate firms in General Santos City and to assess the impact of AI on their work experiences

Research Objectives

This study aimed to investigate the effects of leveraging Artificial Intelligence technologies on the quality of work experiences for employees in real estate firms. Specifically, it sought answers to the following questions: (1) What are the socio-demographic characteristics of real estate firm employees in terms of: age; sex; civil status; educational attainment; preferred technology AI Apps; and AI Apps used in real estate operations; (2) What is the level of artificial intelligence leverage in real estate operations in terms of: awareness and skills? (3) What is the extent of quality of experience of real estate firm employees? and (4) Is there a relationship between leveraging AI in terms of awareness and skills in real estate operations and quality of experience of real estate firm employees?

Literature Review

Before exploring the effects of artificial intelligence (AI) on the business sector, it is crucial to define what AI entails. The term "artificial intelligence" broadly refers to computer software designed to perform tasks like those carried out by humans, including learning, planning, and problem-solving. Using "artificial intelligence" to describe various applications is comparable to calling a car a "vehicle" it is then called a technically correct but overly simplistic classification. To understand the influence of AI in business, it is important to examine the specific types of AI technology most prevalent in this field.

Artificial intelligence (AI) is fundamentally represented by computer systems designed to perform tasks that typically necessitate human intelligence. As Sestino and De Mauro (2022) note, the primary objective of AI is to emulate specific aspects of human cognitive processes. This emulation enables machines to demonstrate behaviors considered intelligent if executed by human beings. Such capabilities reflect not only the machines' ability to learn and adapt but also challenge conventional notions of intelligence by redefining how society perceives the capabilities of machines in comparison to human reasoning.

The increasing integration of AI into everyday processes underscores a transformative phase, wherein machines are not only tools but also partners in executing intelligent functions. This evolution challenges traditional perspectives on human versus machine capabilities and prompts ongoing discussions regarding the ethical and practical considerations of relying on AI in decision-making processes. Businesses have increasingly recognized the potential of AI to enhance competitiveness, innovate products or services, and rethink strategies (Campbell et al., 2020). The adoption of AI and Machine Learning (ML) models has become integral in improving the understanding of complex systems and automating decision-making, though it necessitates ongoing expert involvement (Galanos, 2019).

Davenport (2018) highlights three main ways AI benefits organizations: first, through the automation of administrative, financial, and bureaucratic tasks via Robotic Process Automation; second, by uncovering patterns within data to aid managerial decision-making; and third, by enhancing emotional engagement with employees and customers through tools like chatbots. AI promotes a synergy between humans and machines, allowing advanced systems to perform high-cognitive tasks once deemed impossible (Mahroof, 2019). In some instances, decision-making is increasingly delegated to sophisticated machines trained to operate without final human approval (Zlotowski et al., 2017).

In marketing, AI plays a significant role in analyzing consumer behavior and managing uncertainties associated with marketing strategies. Techniques such as fuzzy logic and Artificial Neural Networks (ANN) help in refining traditional practices and optimizing strategies to enhance customer value (Prior et al., 2019). AI can generate descriptive models to better understand consumer preferences, which can then be incorporated into optimization efforts.

Conway (2018) observed that the real estate industry, particularly in the commercial sector, has been slow to adopt new technologies, including machine learning, and has yet to fully embrace artificial intelligence (AI). Her study highlighted that software capable of performing complex analytical tasks with minimal human oversight could significantly enhance companies' analytics capabilities, leading to rapid advancements in their operations.

By leveraging vast amounts of data and sophisticated algorithms, AI systems can analyze information, recognize patterns, and make decisions (Bharadiya, 2023), thus performing tasks that range from simple to complex. This advancement in technology signifies a profound shift in operational paradigms across various industries, including real estate, healthcare, finance, and more. Consequently, understanding the implications of AI becomes essential for stakeholders aiming to harness its potential for improved productivity and enhanced decision-making capabilities (Kaggwa et al., 2024).

Businesses are progressively recognizing the transformative potential of artificial intelligence (AI) to boost competitiveness, drive innovation in products and services, and revamp business strategies (Campbell et al., 2020). The integration of AI and Machine Learning (ML) models has become essential for enhancing the understanding of complex systems and automating decision-making processes. However,

this integration requires continuous involvement from experts to effectively harness AI's capabilities (Galanos, 2019).

AI's ability to generate descriptive models of consumer preferences allows businesses to better understand and anticipate customer needs. By incorporating these insights into optimization strategies, companies can tailor their offerings more effectively and enhance their competitive edge. For example, AI can analyze customer interactions and feedback to identify preferences and trends, which can then inform product development, marketing campaigns, and customer service approaches (Prior et al., 2019).

Revolutionizing AI from various aspects of business operations, consequently automating routine tasks and uncovering valuable data insights to enhancing customer engagement and refining marketing strategies. Its integration into business processes is not only transforming how companies operate but also presenting new opportunities for innovation and growth. As organizations continue to explore and implement AI technologies, they must also address the challenges associated with their adoption and ensure that they leverage these tools effectively to achieve their strategic objectives.

The real estate industry is increasingly adopting technology to enhance the efficiency, accuracy, and effectiveness of buying and selling processes (Zhu, 2022). Recently, artificial intelligence (AI) has emerged as a transformative force within this sector (Ziakis, 2022), with numerous companies leveraging its capabilities to boost operational efficiency and improve decision-making. Several modern technologies (Tchuente & Nyawa, 2022; Chong & Phillips, 2022) are currently used in the real estate industry to improve the buying and selling process. In contrast to online property listing platforms and real estate websites which are also becoming increasingly popular, virtual reality and artificial intelligence are currently being used in the real estate industry to improve the buying and selling process.

The real estate industry is a dynamic sector that is always full of innovation (Schmidt, 2022). Thanks to artificial intelligence, many industries are transforming and innovating. Artificial intelligence demonstrates its potential to transform the industry with solutions that alter everything from asset management to commercial transactions. By analyzing the data, artificial intelligence can help investment executives decide which asset fits into which fund.

Five examples of artificial intelligence in real estate (Ziakis, 2022; Treleaven, Barnett, Knight, Serrano, 2021) are the following: Automation to enhance portfolio management; AI chatbots to improve property selling; Analytical tools to automate buildings; Machine learning to reduce consumption; and Automated data rooms for deals involving commercial real estate. The use of virtual reality technologies in the real estate industry has been growing in recent years as more companies are oriented to capitalize on their potential to enhance consumers' buying and selling experience. The virtual reality world (Baber, 2019) is clearer and better than ever. Virtual reality is a simulated computer environment, and special computer peripherals and programs, within which the user is provided with a look at the residence, movement, and observation, are becoming a reality. Users are immersed in feeling like they first come to the simulated reality, primarily by stimulating their vision and hearing. image's content moves in some way or is zoomed in or out.

Artificial intelligence in the real estate industry has grown recently as more companies capitalize on its potential to improve efficiency and decision-making (Miljkovic et al., 2023). A market analysis of AI in the real estate industry shows that AI technology helps companies automate repetitive tasks such as property inspections and showings, saving time and money for agents and clients. AI analyzes huge volumes

of data and provides market insights and predictions on property prices, rental rates, and other market trends, which can help real estate professionals make more informed decisions.

Another benefit of AI technology in real estate is its ability to provide personalized and tailored services to clients, such as customized property recommendations and virtual tours based on their preferences and search history. Advancements in AI and machine learning algorithms have enabled the industry to quickly and accurately analyze big data and use it to improve decision-making (Boppiniti, 2019).

AI technology is in the middle stage of development. Real estate companies need to ensure that the data they are using are accurate and unbiased so that the results and predictions made by the AI systems are reliable. The AI market in real estate has much potential to improve client services' efficiency, accuracy, and personalization. Progress in computing has expanded the ability to solve problems at a level users could never have imagined using previously unavailable strategies.

The significance of digital marketing in the real estate sector is increasingly evident and is projected to grow even further in the coming years. (Dwivedi et al., 2021). Over the past decade, the proliferation of internet usage has significantly boosted both the demand for and the availability of real estate. This trend has been further accelerated by the ongoing pandemic, which has underscored the importance of digital marketing in the industry. It is widely recognized that a large percentage of prospective homebuyers now start their search using various online resources. This shift highlights the critical need for the real estate industry to adapt its marketing strategies to leverage digital platforms effectively.

Despite this growing trend, there is a notable gap in research focusing on marketing strategies for the real estate sector, particularly in the context of technologically advancing urban areas (Nalbant & Aydın, 2024). Few comprehensive studies have explored the impact of emerging technologies such as artificial intelligence (AI), augmented reality (AR), virtual reality (VR), mobile technology, and the internet on real estate marketing. This research aims to address this gap by examining how these digital technologies influence marketing strategies in established metropolitan areas.

Conversely, Naeem (2023) stated that technological advancements have revolutionized the real estate market, particularly through the use of virtual reality (VR) for property viewings. This innovation has enhanced communication efficiency and created new opportunities for engaging with potential buyers. To stay competitive, real estate firms must develop customer-centric strategies and invest in digital technologies, including AI, the metaverse, blockchain, digital twins, and AR applications. Further exploration of these technologies is essential to expanding the existing knowledge base and optimizing their use in the real estate sector.

The real estate industry encompasses a wide range of businesses, from real estate consultants to agents. Identifying and engaging potential buyers and their investment portfolios can be achieved through various digital marketing strategies. These include leveraging websites, listing platforms, social media, online advertising, search engine optimization (SEO), email marketing, content marketing, and mobile apps. The effective implementation of these digital marketing technologies is expected to drive sales growth and enhance brand value within the industry.

Theoretical Framework

Theory of Planned behavior (TPB). This study is anchored to the Theory of Planned Behavior (TPB). This theory is a psychological theory developed by Icek Ajzen in 1991 that aims to predict and understand human behavior in specific contexts. TPB extends the earlier Theory of Reasoned Action (TRA) by incorporating an additional component, the perceived behavioral control. Components of TPB are the following: Attitude, Subjective norms, and Perceived behavioral control.

Attitude refers to the individual's positive or negative evaluation of performing a behavior. If a person believes that a behavior will lead to desirable outcomes, they are more likely to engage in that behavior. Subjective Norms involves the perceived social pressure to perform or not perform a behavior. It reflects how much an individual perceives that important others (e.g., family, friends, colleagues) expect them to engage in the behavior. Perceived Behavioral Control is the individual's perception of their ability to perform a behavior. It includes factors such as self-efficacy and external constraints. This component reflects how much control a person feels they have over the behavior, which can affect their intentions and actual behavior.

TPB was developed to address some limitations of TRA, particularly the role of perceived behavioral control. TRA posits that behavioral intentions are the primary predictors of actual behavior, but it does not fully account for situations where individuals may not have complete control over their actions. TPB introduced the concept of perceived behavioral control to cover these situations, making the theory more comprehensive.

The Theory of Planned Behavior (TPB) takes part in this study to analyze the level of awareness and skills of the real estate firm employees and its influence on the quality of experience by integrating AI in the real estate operational management.

Conceptual Framework

Figure 1 illustrates the conceptual framework for this research, highlighting the relationship between the identified variables. The independent variable is the application of artificial intelligence in real estate operations, whereas the dependent variable pertains to the quality of experience for employees within real estate firms. Utilizing a descriptive-correlation approach, this study aims to uncover the significant relationship existing between these two variables.

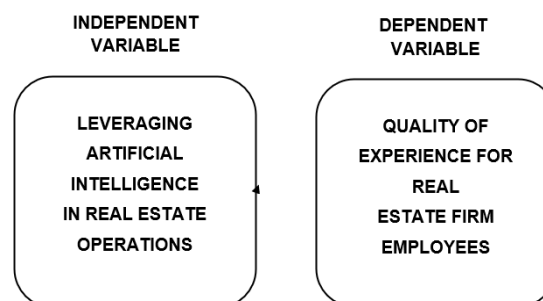


Figure 1. Conceptual Framework

Methods

Research Design

This research used quantitative specifically the descriptive-correlational design. Descriptive is a type of research that answers the who, what, when, where and how questions (Dovetail, 2023). This approach was appropriate since the study sought to determine the socio-demographic characteristics of real estate firm employees, the type of apps used by real estate firm employees, the level of artificial intelligence leverage in real estate operations in terms of awareness and skills, and the extent of quality of experience of real estate firm employees. Furthermore, the study sought to find out whether there was a significant relationship between leveraging artificial intelligence terms of awareness and skills in real estate operations and quality of experience of real estate firm employees in General Santos City.

Research Locale

This research was conducted among a randomly selected sample of real estate firms in General Santos City. A comprehensive list of realty companies and services was compiled, categorizing them into small, medium, and corporate entities, based on records obtained from the city's real estate directory. However, it is important to note that the current operational status of these firms was uncertain, introducing an element of risk regarding their active engagement in the market.

General Santos City presented an ideal location for this study due to its vibrant real estate industry and culturally diverse population. The city is characterized by a strong presence of leading and active realty companies that dominate the market. The competitive nature of General Santos City's real estate landscape offers a variety of real estate agents and properties for consumers, highlighting the dynamic environment in which these firms operate.

Respondents of the Study

The respondents of the study consisted of one hundred (100) real estate practitioners. The sampling technique employed was simple random sampling, which ensured that each individual within the population had an equal chance of being chosen, thereby eliminating bias in the selection process. The total population of real estate companies and services in General Santos City was determined to be one hundred twenty-two (122). The sample size of one hundred (100) real estate practitioners was calculated using Slovin's Formula, maintaining a 5% margin of error. Consequently, one hundred (100) practitioners were randomly selected from among the various companies.

Research Instrument

The research instrument of the study was adapted and modified from a survey instrument of Goldberg (2023) aimed to determine the student's awareness, skills, and experience about Artificial

Intelligence. In this study, the researchers categorized the parameters into three parts. Part 1 pertains to the socio-demographic characteristics of the respondents which include age; sex; civil status; educational attainment; preferred technology ai apps; and ai apps used in real estate.

Part 2 refers to the level of leveraging Artificial Intelligence in terms of Awareness and Skills of the real estate practitioners. Level of artificial intelligence leverage in real estate operations in terms of awareness and skills.

Part 3 is on the extent of quality of experience of real estate firm employees in integrating AI in real estate operations.

The instrument was subjected to content validity and reliability by panel of experts from Cronasia Foundation College before actual administration to the respondents. Validity assured the researcher that the instrument answers the objectives of the study or the essence, topics, and areas that the test was designed to measure (Fraenkel & Wallen, 2018). Suggestions of the validators was taken cared of before reproducing the instrument for reliability determination.

The validated instrument was further pilot-tested to at least twenty percent (20%) actual real estate employees however in Kidapawan City to determine the internal consistency of the items. The data obtained during pilot testing were run in the software to obtain Cronbach alpha coefficient at least 0.7 to be deemed valid and reliable. Then, the survey questionnaires were distributed in-person to the respondents for data gathering.

Statistical Treatment

Appropriate statistical tools were used to analyze and interpret the data gathered in the study:

- Frequency counts and percentages were used to compute the socio-demographic characteristics of the respondents.
- Weighted mean was used to determine the level of leveraging Artificial Intelligence in real estate operations.
- Weighted mean was also employed to determine the level of quality experience real estate firm employees.
- Pearson Product Moment Correlation was used to find out whether there is significant relationship between leveraging Artificial Intelligence in real estate operations and quality of experience of real estate firm employees.

Results and Discussion

Socio-Demographic Characteristics of the Respondents

The demographics of the respondents reveal a diverse group and were rated relative to their age, sex, civil status, educational attainment, preferred AI technology apps, and AI apps used in real estate.

Table 1. Socio-demographic Characteristics of Real Estate Firm Employees

SOCIO-DEMOGRAPHIC PROFILE	Frequency	Percentage
AGE		
20 yrs. old & below	1	1%
21 - 30 yrs. old	44	44%
31 – 40 yrs. old	33	33%
41 – 50 yrs. old	12	12%
51 yrs & above	10	10%
SEX		
Female	74	74%
Male	26	26%
EDUCATIONAL ATTAINMENT		
Post Graduate	6	6%
College Graduate	62	62%
College Level	30	30%
High School Level	2	2%
Elementary Level	0	0%
CIVIL STATUS		
Single	51	51%
Married	43	43%
Widowed	5	5%
Separated	1	1%
PREFERRED AI TECHNOLOGY APPS		
Laptop	44	44%
Computer	56	56%

Tablet	29	29%
smartphone.	79	79%
Ipod	2	2%
Netbook	3	3%
UTILIZED AI APPS IN REAL ESTATE		
Property 24	40	40%
Lamudi	32	32%
Rebenta	20	20%
Finsights	5	5%
Zipmatch	9	9%
KMC savills	2	2%
GHL	0	0%
ChatGpt	14	14%
CiCi	6	6%
Meta AI	4	4%
Roi	1	1%

The socio-demographic profile table provides an extensive overview of various characteristics of participants, including age, sex, educational attainment, civil status, preferred AI technology applications, and utilized AI apps in the real estate sector. This data offers valuable insights into the composition of respondents and their preferences, which can inform stakeholders and organizations within this field.

In terms of age, the majority of the respondents are relatively young, with 44% falling between the ages of 21 and 30 years old and 33% within the 31 to 40 years old range. A smaller percentage of respondents are aged 41 years and above, with 12% in the 41 to 50 years old category and 10% aged 51 years or older. Only 1% of respondents are aged 20 years old or below.

In terms of sex, the majority of the respondents are female, comprising 74% of the group, while 26% are male. This means female are more commonly working in real estate jobs, but men are still part of the workforce. The result of the study contradicts with the statement according to Adfenix and Time (2024) which state that male is dominant which could be because some jobs or leadership roles in real estate have traditionally been more suited for men. However, the fact that women are also part of the workforce shows that they are contributing to this field, even if they are fewer in number. When it comes to using artificial intelligence (AI), men and women might have different experiences or needs. This means that training and support should consider these differences to make sure both men and women can use AI effectively in their jobs (Word Economic Forum, 2024).

This is a great opportunity to use artificial intelligence (AI) to improve their work and appeal to their tech-savvy nature. AI can make tasks easier, help engage customers better, and support decision-making. It also needs to be flexible and cater to the diverse needs and challenges of workers from various backgrounds (Word Economic Forum, 2024).

Regarding educational attainment, the respondents are largely college-educated, with 62% holding a college degree and 30% being college level. A smaller portion, 6%, have attained postgraduate education, while 2% have completed only high school education. Notably, none of the respondents have elementary-level education.

Moreover, the majority (51%) of the respondents are single, indicating that over half of the individuals have not been married. Meanwhile, a significant portion (43%) are married, showing that almost half have spouses. A smaller percentage of respondents are widowed (5%), which means they have lost their spouse, or separated (1%), indicating they live apart from their spouse but are not legally divorced.

The data on the preferred technology and AI apps used by real estate firm employees provides insight into the tools and technologies commonly utilized in the industry.

When it comes to preferred technology, 56% of the respondents primarily use a computer, while 44% prefer using a laptop. Smartphones are the most commonly used device, with 79% of respondents utilizing them, followed by tablets at 29%. A smaller percentage of respondents use iPods (2%) and netbooks (3%), showing that these devices are not widely adopted for work purposes.

In terms of AI applications, the most popular is Property 24, used by 40% of respondents, indicating its widespread use among real estate firm employees. The next most commonly used app is Lamudi, with 32% of respondents utilizing it, followed by Rebenta, which is used by 20%. Zipmatch and ChatGPT are also used, with 9% and 14% of respondents, respectively. Other AI apps like Finsights and CiCi are used by smaller groups, with 5% and 6% of respondents, respectively. KMC Savills and Meta AI are used by even fewer respondents, at 2% and 4%, respectively, while Roi is used by only 1% of respondents. Notably, GHL is not used by any of the respondents.

Overall, the data highlights that smartphones, computers, and laptops are the preferred devices for real estate employees, with a strong reliance on mobile technology, while apps like Property 24 and Lamudi dominate the use of AI applications in the industry. National Association of Realtors (2021) highlights that the Real estate professionals heavily rely on smartphones and apps like Property24 and Lamudi. These platforms provide user-friendly interfaces, extensive property listings, and market insights, enhancing efficiency and productivity.

Level of Artificial Intelligence Leverage in Real Estate Operations

This study explored the level of leveraging artificial intelligence relative to employees awareness and skills in real estate operations, highlighting how AI technologies enhance efficiency, decision-making, and customer engagement within the industry.

Table 2. Level of Leveraging Artificial intelligence based on Awareness

Indicator	Mean	Description
1. You may find AI overwhelming when analyzing property data or managing interactions in your real estate firm.	3.80	Agree
2. In your role, you often encounter AI news and updates that may impact your work.	3.89	Agree
3. AI topics frequently come up in conversations with colleagues or during real estate technology meetings.	3.90	Agree
4. You attend seminars and workshops on AI technologies to improve your skills in the real estate industry.	3.75	Agree
5. You often discover opportunities to learn more about AI while staying updated on real estate industry advancements.	3.96	Agree
Overall Mean	3.86	Agree

Legend: 4.50-5.00 Strongly Agree, 3.50-4.49 Agree, 2.50-3.49 Moderately Agree, 1.50-2.49 Disagree, 1.00 1.49 Strongly Disagree

The data presented in the table illustrates a clear trend among real estate professionals towards embracing artificial intelligence (AI) as a crucial component of their development. The highest mean score of **3.96**, associated with the statement on discovering opportunities to learn more about AI, underscores a widespread recognition among respondents that there are numerous avenues available for enhancing their understanding of AI within the context of the real estate market. This inclination towards proactive learning reflects a commitment to professional growth and indicates an awareness of the significant role AI plays in shaping industry practices.

In addition, the second highest mean score of **3.90** indicates that AI discussions are prevalent among colleagues and during technology meetings. This frequency of dialogue around AI points to an increasing communal consciousness regarding its relevance and potential applications in real estate. It suggests that real estate professionals not only acknowledge the need to familiarize themselves with AI but also engage in collaborative efforts to explore how it can be effectively integrated into their work, thereby enhancing innovation in their practices.

The overall average score of **3.86** indicates that respondents **Agree** that AI is essential for enhancing their professional capabilities. This score signifies a collective agreement on the value that AI can bring to operational practices, which in turn may lead to improved service delivery and efficiencies. Respondents express a shared belief that AI not only enhances their ability to perform tasks but also offers innovative solutions that can streamline operations and decision-making processes.

In consonance with this, Luca and Ciobanu (2016) strongly urge that the adequate knowledge particularly in the advanced technology are necessary for agents to build trust and ensure client satisfaction at the same manner individual experiences. Research indicates that in real estate, AI enhances productivity and quality in tasks within its capabilities and can improve efficiency in various functions (Szumilo & Wigelman, 2024).

Table 3. Level of Leveraging Artificial intelligence based on Skills

Indicator	Mean	Description
1. Your AI skills for market analysis or property valuation come from formal training and experience.	3.79	Agree
2. AI technologies are encouraged in your firm to enhance business practices and decision-making efficiency.	3.71	Agree
3. You seek opportunities to learn AI for improving property management systems or market forecasting.	3.93	Agree
4. The development of your AI skills relies on the training opportunities offered by your organization.	3.77	Agree
5. You're cautious but open to exploring AI's potential benefits for market analysis and operational efficiency.	3.96	Agree
Overall Mean	3.83	Agree

Legend: 4.50-5.00 Strongly Agree, 3.50-4.49 Agree, 2.50-3.49 Moderately Agree, 1.50-2.49 Disagree, 1.00 1.49 Strongly Disagree

The data in Table 3 shows that real estate professionals are increasingly interested in using artificial intelligence (AI) to improve their work. The highest average score of **3.96** indicates that while many respondents are cautious, they are still open to exploring how AI can be beneficial for market analysis and improving operational efficiency. This suggests a recognition of the potential advantages that AI can bring, but also a careful approach towards its implementation.

A close second with an average score of **3.93** suggests that professionals are actively looking for ways to learn about AI to enhance property management systems and market forecasting. This shows that they see how AI can help them work better and make more accurate predictions about the market.

The overall mean score of **3.83** indicates that the real estate employees **Agree** that are well-prepared in terms of AI skills, with strong interest in learning more and applying AI in various aspects of their work. However, the reliance on formal training and the cautious approach to AI adoption suggest there may be room for further development and support in fully integrating AI into their operations.

The above results corroborate with Ameen & Lichtenstein (2022) who emphasized that adopting AI requires a robust technological infrastructure and adequate computing resources aligned with policy frameworks, such as addressing data privacy concerns, the digital divide, and the need for ongoing employees training and development to improve skills. In the other hand, High employee turnover in real estate firms often leads to decreased customer satisfaction and loyalty. Depicted in the study of Bamidele & Koleoso (2016) that the frequent loss of skilled staff due to poor quality practices can negatively impact service delivery and performance.

The Level of Quality Experience of Real Estate Firm Employees

The level of quality experience among real estate firm employees is crucial for enhancing overall performance, employee satisfaction, and client relationships within the industry.

Table 4. Level of Quality Experience of Real Estate Firm Employees

Indicator	Mean	Description
1. AI tools streamline property valuation, market analysis, and customer engagement, optimizing daily operations and decisions.	3.92	Agree
2. AI is essential for analyzing market trends, valuing properties, and managing client interactions efficiently.	4.01	Agree
3. AI tool accuracy ensures reliable property valuations and market analysis for informed decision-making.	3.91	Agree
4. AI enhances work tasks like property valuation, market analysis, and client engagement, improving your experience.	3.96	Agree
5. You use AI to streamline processes, optimize marketing strategies, and improve customer service in real estate.	3.90	Agree
6. You comfortably use AI, like Chatbot, for property descriptions, client communication, and market reports.	3.87	Agree
7. AI integration in real estate boosts efficiency, decision-making, and leads to higher monetary returns and quality of income.	3.97	Agree
Overall Mean	3.93	Agree

Legend: 4.50-5.00 Strongly Agree, 3.50-4.49 Agree, 2.50-3.49 Moderately Agree, 1.50-2.49 Disagree, 1.00 1.49 Strongly Disagree

Table 4 illustrates the level of quality experience of real estate firm employees. The highest mean score of **4.01** is associated with the statement that "AI is essential for analyzing market trends, valuing properties, and managing client interactions efficiently." This score indicates that real estate practitioners **Agree** on the importance of AI tools in their daily operations. They likewise acknowledge that AI technologies are not just beneficial but necessary for enhancing efficiency and accuracy in key activities such as property valuation and client relationship management. This level of agreement suggests that many professionals view AI as a valuable asset in navigating the complexities of modern real estate markets. The mean score of **3.97**, which relates to the assertion that "AI integration in real estate boosts efficiency, decision-making, and leads to higher monetary returns and quality of income." This score further illustrates the belief that embracing AI can result in tangible financial benefits. Real estate agents and firms are increasingly understanding that AI capabilities, especially in optimizing processes and improving decision-

making, can enhance profitability and overall career performance. The agreement reflects a growing recognition of the potential economic advantages associated with employing AI technologies.

The overall mean score of **3.93** indicates a general agreement among respondents about the effectiveness of AI tools in their professional activities. This score consolidates the enthusiasm and acknowledgment of AI's transformative role within the real estate industry. This implies that real estate firms may need to further invest in AI research and development. Training employees on AI applications will not only enhance operational efficiency but will also improve customer service, leading to higher client satisfaction and loyalty.

As pointed out by Bharadiya et al. (2023) , the ongoing advancements in AI offer significant advantages by enabling new forms of collaboration and innovation within companies. The rapid technological evolution has made it possible for businesses to offer branded services and explore novel corporate interactions with consumers and employees. AI's digitalization has prompted businesses to focus on their current strategies while continuously seeking new market opportunities to stay competitive. The impact of AI extends beyond the corporate world, influencing various industrial sectors, including business and economics.

As businesses adapt to the digitalization brought about by AI, it becomes increasingly important to explore the significant relationship between leveraging AI in real estate operations and enhancing the quality of experience for employees in the competitive real estate market.

Relationship between Leveraging AI in Real Estate Operations and Quality of Experience of Real Estate Firm Employees

The integration of AI in real estate operations has the potential to transform the work environment, significantly enhancing the quality of experience for employees by streamlining processes and providing actionable insights.

Table 5. Correlation Matrix on the Relationship between Leveraging AI in Real Estate Operations and Quality of Experience of Real Estate Firm Employees

Artificial Intelligence Leverage	Quality of Experience of Real Estate Firm Employees			
	<i>Computed r value</i>	<i>p-value</i>	<i>Decision</i>	<i>Remarks</i>
Awareness	0.637	0.00	Reject Ho	Significant
Skills	0.412	0.00	Reject H _o	Significant

The statistical results reveal **significant relationships** between Artificial Intelligence (AI) leverage and the quality of experience for real estate firm employees in terms of Awareness and Skills. For awareness

of AI, the computed r value of **0.637** indicates a moderate to strong positive correlation with the quality of experience, meaning that as employees' awareness of AI increases, their experience with AI tools improves. The p -value of **0.00**, which is below the standard threshold of 0.05, leads to the rejection of the null hypothesis (H_0), confirming that the relationship between awareness and quality of experience is statistically significant. This suggests that greater awareness of AI contributes positively to the employees' overall experience, making them more comfortable and proficient in using AI tools within their roles.

Similarly, for skills in integrating AI, the computed r value of **0.412** shows a moderate positive correlation between employees' skills in using AI and their quality of experience. The p -value of **0.00** also indicates statistical significance, resulting in the rejection of the null hypothesis. This finding implies that employees who possess stronger skills in integrating AI into their work tend to have a better quality of experience when using AI. In other words, as employees' capabilities to effectively use AI technologies improve, their overall experience with AI becomes more positive and productive.

Together, these results suggest that both awareness of AI and skills in integrating AI are key factors in enhancing the quality of experience for real estate firm employees. By increasing awareness and improving skills, employees are more likely to have positive and effective interactions with AI tools, thus maximizing the potential benefits of AI in real estate operations.

The above result is gleaned from the study of Folger (2021) which outlines that the role of a real estate agent encompasses several key areas: administrative tasks, lead generation, interactions with buyers and sellers, property showings, and ongoing education. As intermediaries in the property market, real estate agents provide crucial local market knowledge, bridging the information gap between buyers and sellers. Their responsibilities include managing administrative duties, generating leads, collaborating with clients, organizing property viewings, and other essential functions. The performance is based on their experiences of real estate agents is vital for stimulating growth in the property market. Agents help mitigate information asymmetry in the market, reduce search and transaction costs, facilitate price discovery, and streamline transactions (Dilek, 2014).

CONCLUSION AND RECOMMENDATIONS

Conclusion

Based on the findings of the study, the following conclusions were drawn:

1. In terms of socio-demographic characteristics of the respondents, majority are relatively young, specifically within the age range of 21 to 30 years old. A significant portion of the respondents are female, hold a college degree, and mostly single. In terms of technology preferences, smartphones emerged as the most widely used devices among the respondents. Regarding AI applications, Property 24 was the most popular choice, indicating a trend towards utilizing advanced technology within the real estate sector.
2. Respondents **agree** that they have a strong awareness of AI's importance and are equipped with the necessary skills to leverage it effectively.
3. Respondents **agree** that quality of experience in real estate firms are essential for improving overall performance, employee satisfaction, and client relationships.
4. There is a **significant relationship** between the level of leveraging Artificial Intelligence in real estate operations based on awareness and skills and the level of quality experience among real estate firm employees.

Recommendations

Based on the findings and conclusions, the following are recommended:

1. Real estate businesses in General Santos City should focus on providing training and career growth opportunities, especially for young women in sales roles.
2. Real estate practitioners should leverage AI, such as chatbots, to streamline property descriptions, enhance client communication, and generate market reports efficiently
3. Real estate companies should invest in training programs that focus on optimizing the use of popular AI apps like Property 24 and Lamudi in their smartphones and laptops. Encouraging employees to become proficient in these tools can further improve efficiency and productivity.
4. For further study, it is recommended that future researcher should examine any challenges or obstacles in using AI, like technical problems or reluctance to adopt new technology, to improve how AI is used in the real estate industry.

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