

Midocean University

College of Management

Master in management (MiM)



قياس وعي المجتمع السعودي بممارسات اليومية للذكاء الاصطناعي

Measure the KSA Society Awareness in Artificial Intelligence (AI) Daily Activities

Graduation Project

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Chapter 1: Abstract

Key Conclusions

- The number of people who participated in the questionnaire, and the number of males among them (89) and the number of females (24) which explains the greater societal awareness of males over females.
- We find that the rate of awareness of ages, which ranges between approximately 20:50 years, gradually decreases as the ages increase, and this indicates an increase in awareness of the emerging generations and its decrease as the age increases.
- The distribution of the questionnaire in all regions of the Kingdom of Saudi Arabia shows a proportional distribution to some extent.
- The result of the questionnaire on those who work in private or government jobs and its increase over people who do not work in any jobs or freelance jobs is very different, and this indicates more interest in distributing the questionnaire to government and private interests.
- The number of years of experience, we find that the more years of experience, the less participation, and this is considered normal because the more experienced people and managers are fewer in number compared to the number of employees, whose experience is less.
- The educational level, we find, is relatively commensurate with the years of experience in terms of the lack of participation for master's and doctoral holders, due to the limited numbers of graduates of universities and secondary schools, in which there are large numbers of students, or this is considered normal.

Key Recommendations

First, with regard to the gender factor, awareness campaigns for females should be increased and their knowledge of artificial intelligence and what are its pros and cons, and its various uses should be increased.

For the coefficient of the Region, ages, Experiences, and educational qualifications, these are considered normal rates. With regard to the coefficient of dependence on the type of job, it is necessary to rely on all working groups to determine the maximum knowledge of the subject under study, in addition to identifying deficiencies and working on them. With regard to the data subject of the questionnaire, we find that there is a fear that artificial intelligence will replace humans, and this carries a large degree of agreement among the respondents in the study, but there is an understanding of the role of artificial intelligence in the development of fields in general in the Kingdom of Saudi Arabia, as well as knowing the limits of the risks of its uses.

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Chapter 2: Research Background

Introduction

The age of data and AI is heading, and the world has become more conscious of AI's huge potential since the first AI applications were released. Due to the remarkable pace of AI developments, model improvements, and new product introductions, data and AI strategy are a hot topic of conversation across a variety of industries and practices worldwide. We need to be prepared for the profound economic, legal, political, and regulatory effects that artificial intelligence will have on our society. As the AI is quickly becoming a common part of daily life it expected the next wave of successful businesses, leaders, and high quality of life will be for those who understand and apply AI.

The age of data and AI is upon us, the world has become more aware of AI's enormous potential since the first AI applications were released. Data and AI strategy are at the forefront of discussions across various practices in the world due to the unprecedented pace of AI discoveries, model advancements, and new products on the market. The transformative impact of artificial intelligence on our society will have far-reaching economic, legal, and regulatory implications that we need to be discussing and preparing for.

As AI is fast becoming a regular part of daily life, it is the next wave of successful businesses, leading high quality of life for those who comprehend and use AI. Kingdom of Saudi Arabia (KSA) has a clear vision to participate and involve in the AI revolution. Saudi Arabia is making significant strides, ranked second globally for AI awareness, the country has taken substantial steps to drive AI advancements within its borders. Collaborative efforts, such as the KAUST Artificial Intelligence Initiative, bring together faculty from across the King Abdullah University of Science and Technology (KAUST) to spearhead interdisciplinary AI projects and innovation. The National Center for AI plays a pivotal role in guiding the nation's AI development and innovation, aiming to secure a global leadership position in the field. From governance models to market analysis, Saudi Arabia's commitment to AI research and implementation is evident. Collaborative research centers, like the SDAIA-KFUPM Joint Research Center for Artificial Intelligence, are established to further propel AI research in the Kingdom. As Saudi Arabia embraces AI's potential, its journey toward technological leadership is illuminated by a commitment to awareness, innovation, and collaborative research.

In this research we mentioned aims to measure the impact of Artificial Intelligence (AI) on society's lifestyle. This is an important and relevant topic, considering the rapid advancements and increased integration of AI in various aspects of our lives. By analyzing and understanding the effects of AI on society, we can better prepare for the opportunities and challenges it presents, and to measure the impact of AI on society's lifestyle, several key areas can be considered:

- First: Economic Impact: AI has the potential to revolutionize industries and create new business models. It can increase productivity, automate tasks, and enable innovative products and services. Measuring the economic

impact involves assessing changes in job markets, workforce composition, productivity gains, and overall economic growth.

- Second: Social Impact: AI technologies have the ability to enhance social interactions, improve healthcare outcomes, and address societal challenges. Measuring the social impact involves evaluating changes in healthcare delivery, education, transportation, accessibility, and inclusivity.
- Third: Ethical and Legal Implications: AI raises important ethical and legal considerations. Measuring the impact involves examining issues such as privacy, security, algorithmic bias, transparency, accountability, and the ethical use of AI in decision-making processes.
- Fourth: Political and Regulatory Implications: AI technologies require appropriate governance and regulation to ensure responsible development and deployment. Measuring the impact involves assessing policy changes, regulations, and the societal response to AI advancements.
- Fifth: Quality of Life: AI has the potential to improve the overall quality of life for individuals and communities. Measuring the impact involves evaluating changes in healthcare outcomes, access to information, personalized experiences, and the overall well-being of individuals.

To conduct the study, a combination of quantitative and qualitative research methods can be employed. This may include surveys, interviews, data analysis, case studies, and literature reviews.

Gathering insights from experts in various fields, monitoring AI deployments, and analyzing real-world data can provide valuable information for measuring the impact of AI on society's lifestyle.

By the end of this study, we aim to be able to measure the impact of Artificial Intelligence (AI) on society's lifestyle.

Research Problem

The increasing integration of Artificial Intelligence (AI) into various aspects of society brings forth a multitude of benefits, but it also raises concerns regarding inequality, laziness, and the potential loss of creativity. As AI automates repetitive tasks and replaces certain occupations, there is a growing concern that it may exacerbate existing inequalities by disproportionately impacting certain segments of the population. This research aims to investigate the extent to which AI contributes to socioeconomic inequality, exploring the mechanisms through which it affects employment patterns, income distribution, and overall societal well-being.

Furthermore, the widespread adoption of AI technologies has sparked debates about its impact on human behavior, particularly in relation to laziness and creativity. With AI's ability to automate tasks previously performed by

humans, there is a concern that individuals may become reliant on AI systems, leading to decreased motivation, engagement, and a potential loss of creativity. This research seeks to examine the effects of AI on human behavior, exploring whether AI fosters a culture of laziness or serves as a catalyst for new forms of creativity.

While there are many benefits to AI and despite ranking second globally for AI awareness, there are also concerns encompass a range of dimensions, these include:

- Perceptions and Opinions: Research seeks to understand public perceptions and opinions about AI.
- Education Integration: There's a need to assess the integration of AI awareness within educational systems, especially in higher education.
- Public Understanding: Studies focus on gauging knowledge, understanding, and awareness levels regarding AI among the general population.
- AI Integration in Public Sector: Challenges in assimilating AI within the public sector, including organizational attention and distribution, are explored.

Finally, by automating repetitive work and replacing occupations, AI has the potential to worsen inequality. Is AI causing an increase in laziness or a loss in our creativity?

While Saudi Arabia has made considerable progress in AI awareness, addressing these research problems can lead to more effective strategies for enhancing societal understanding and engagement with artificial intelligence.

The Importance of The Research

The research plays a pivotal role in expanding our understanding of AI's impact on society's lifestyle. It informs decision-making, policy development, and ethical considerations, while helping us identify opportunities and challenges associated with AI adoption. By conducting research, we can navigate the transformative age of AI more effectively, ensuring its integration aligns with societal values, promotes fairness, and enhances the overall well-being of individuals and communities.

In Saudi Arabia and globally, such research supports responsible AI adoption and promotes a well-informed populace, crucial for harnessing the benefits of AI while addressing its challenges. This research can expand our deep understanding about the society AI practices in everyday activities. The research into society's awareness of artificial intelligence (AI) holds profound significance due to several reasons:

- Transformative Vision: AI aligns with Saudi Arabia's Vision 2030 for economic transformation, emphasizing its significance.
- Informed Decision-Making and Strategic Development: It empowers individuals and policymakers to make informed decisions about AI integration and its implications. Therefore Saudi Arabia's AI strategy aims to lead in research and development, making research vital for informed decisions.
- Resource Allocation: Studies on resource awareness in AI are vital for sustainable development and responsible resource allocation.
- Technological Literacy: Enhances public understanding of AI's role in everyday activities, contributing to technological literacy and informed engagement.
- Policy Formulation: Research influences the formulation of policies that govern AI development, deployment, and ethical considerations.
- Risk Mitigation: Raising awareness of AI risks and rewards fosters proactive measures for mitigating potential negative impacts.
- Societal Well-Being: Understanding AI's societal impact aids in shaping technology for the betterment of society.
- Global Ranking: The country's global ranking in AI awareness reflects its progress and informs future initiatives.
- Education: AI awareness research aids in designing educational curricula and programs to prepare the workforce for AI-driven industries.

In summary, research on KSA society's awareness of AI serves as a foundation for strategic, societal, and economic development, enabling Saudi Arabia to effectively harness the potential of artificial intelligence.

Research Hypotheses

Hypothesis 1: AI user ages significantly impact our daily life practices.

- Null hypothesis (H0): There is no significant relationship between AI user ages and daily life practices.
- Alternative hypothesis (H1): AI user ages have a significant impact on daily life practices.

Hypothesis 2: AI user level of education significantly affects our daily life practices.

- Null hypothesis (H0): There is no significant relationship between AI user level of education and daily life practices.

- Alternative hypothesis (H1): AI user level of education has a significant impact on daily life practices.

Hypothesis 3: AI exhibits biased behavior towards specific genders.

- Null hypothesis (H0): AI does not exhibit biased behavior towards any specific gender.
- Alternative hypothesis (H1): AI demonstrates biased behavior towards specific genders.

Research Limitation

A potential research limitation in this research about KSA society awareness in artificial intelligence could be the lack of diversity in the sample population. If the study predominantly focuses on a specific demographic, such as certain age groups, educational levels, or urban areas, the findings might not be representative of the broader Saudi Arabian population's awareness levels.

- This research does not strive to present an exhaustive framework encompassing the entirety of AI research literature. Instead, its objective is to establish a foundational point for the synthesis of knowledge within the realm of AI research and to propose potential pathways for future exploration. The paper embarks on an exploration of specific emerging disciplines, such as environmental pollution, medicine, maintenance, manufacturing, and more, as avenues to uncover insights and potential trajectories for further investigation.
- Continued research efforts are essential to expand the current boundaries of AI knowledge. This expansion can be achieved by assimilating the principles and philosophies from traditional disciplines into the existing AI frameworks, as proposed by Markham et al. (2000). For instance, when devising an AI system for addressing a medical concern through a survey-based study, integrating principles such as statistical significance, confidence limits, experimental design, and hypothesis testing could significantly enhance the research's quality and the effectiveness of the resultant software design. This collaborative integration of traditional methodologies and AI concepts holds the potential to yield more robust and impactful outcomes.
- In the field of agriculture, AI holds potential applications in enhancing the accuracy of bovine carcass classification. Through the deployment of AI algorithms, it becomes feasible to examine potential variations in classifier behavior, ultimately impacting the consistency of grading outcomes. This advancement has the capacity to bring about more transparent and standardized beef markets across different nations and regions.

- Moreover, as carcass conformation varies between light and standard carcasses, the utilization of AI could contribute to refining carcass conformation evaluations in market contexts. This improvement can encompass a diverse range of animal ages and weights upon slaughter, enhancing the precision of assessment and classification processes.
- The application of AI search techniques holds significant importance in the exploration of circuits and systems design space. Future researchers could delve into elucidating the specific categories of search techniques that prove beneficial for this purpose. This inquiry can extend to understanding the positions, roles, and methods of incorporating these techniques within the context of circuit and system design.
- One avenue of investigation could focus on the development of search techniques, such as heuristics, tailored for the automated creation and identification of the most promising solutions to challenges encountered in circuit synthesis. By delving into these areas, researchers can contribute to enhancing the efficiency and effectiveness of circuit and system design processes, thereby advancing the capabilities of AI in this domain.
- The application of AI methods holds potential in estimating tool wear in lathe turning processes. Various AI techniques, including conventional methods, neural networks, and fuzzy decision support systems, can be harnessed for this purpose. A crucial aspect of this endeavor involves investigating the correlation between tool wear estimation and the measurement of cutting force components. By utilizing AI methodologies in this context, researchers can develop predictive models that enhance the accuracy of tool wear estimation, ultimately optimizing lathe turning processes.
- Sample Representativeness: The study's findings and conclusions are limited to the sample population of individuals aged 25 and older living in the Kingdom of Saudi Arabia. The generalizability of the results to other populations or regions may be limited.
- Self-Selection Bias: The online survey methodology used in this study may be subject to self-selection bias. Participants who chose to respond to the survey may have different characteristics or perspectives compared to those who did not participate, potentially affecting the generalizability of the findings.
- Response Bias: The responses provided by participants may be influenced by social desirability bias or other response biases. Participants may provide socially acceptable or expected answers rather than their true beliefs and experiences, which could impact the accuracy and reliability of the data.

- **Limited Scope of Questions:** The set of questions used in the study may not capture the full range of AI impact in daily life. The specific uses of AI addressed in the questions may not cover all relevant aspects, potentially limiting the comprehensive understanding of AI's impact.
- **Cross-Sectional Design:** The study employed a cross-sectional design, capturing data at a specific point in time. This design limits the ability to establish causal relationships or capture longitudinal changes in AI awareness and perceptions over time.
- **Potential Language and Cultural Bias:** The survey was conducted in a specific cultural context, the Kingdom of Saudi Arabia, which may introduce language and cultural biases in the responses. The findings may not be directly applicable to other cultural contexts.
- **Lack of Control Group:** The study did not include a control group or comparison group. Therefore, it may be challenging to isolate the specific effects of AI on daily life practices or determine the extent to which AI is responsible for observed changes.

This limitation can impact the generalizability and applicability of the research's results to the entire society. To mitigate this, we take in consideration employing a more diverse and representative sampling strategy, encompassing various regions, socioeconomic backgrounds, and demographics. This would enhance the study's validity and allow for a more comprehensive understanding of the awareness landscape in KSA regarding artificial intelligence.

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Chapter 3: Literature Review

Artificial Intelligence (AI) plays a more and more crucial role. In general, intelligence is defined as having the mental ability to take in knowledge and use it to solve challenging problems. Researchers predict that soon clever machines will surpass human abilities. Artificial intelligence (AI) refers to intelligent devices and software that can reason, absorb, gather knowledge, interact, control, and distinguish between objects. John McCarthy used the phrase in 1956 to describe a brand-new area of computer science that tries to make machines behave like people. By using computational analysis, we can comprehend how various AI systems behave in a variety of ways. While computer science focuses on interpretation, thinking, and execution, AI, in contrast to psychology, emphasizes computation. AI techniques increase mental acuity and adaptability.

- Artificial intelligence (AI), a specialized domain within computer science, is characterized by the proficient utilization of computer technologies achieved through enhanced programming methodologies (Joost, 2009). Researchers have defined AI as a system that can reason logically, exhibit rational behavior, or accomplish both tasks in ways akin to human cognition (Kok et al., 2009). Consequently, a range of technologies frequently employed to emulate human intelligence, including neural networks, expert systems, deep learning, symbolic machine learning, speech recognition, image recognition, natural language processing, and statistical analysis, fall under the AI umbrella (Lu et al., 2018). Over the past decades, a multitude of educational initiatives focused on AI have been introduced on a global scale across diverse application domains, such as science and mathematics education (Colchester et al., 2017; Hwang, 2003; Kok et al., 2009).
- Recent scholarship has expounded upon the purpose of AI, describing it as a discipline dedicated to imbuing machines with intelligence and expanding their role within various environments to achieve envisioned goals. The applications of AI have also facilitated the extension of theoretical understanding and the development of novel forms of intelligence, including visual perception, speech recognition, decision-making, and language translation (Chassignol et al., 2018).
- Buch et al. (2018) underscored that AI systems can generate recommendations based on data analysis, a valuable aid for domain experts in the decision-making process. Lu et al. (2019) provided a more comprehensive delineation of AI, emphasizing its broad applicability across various fields. They defined AI as a technology capable of executing predetermined procedures and rules, thereby acquiring knowledge from datasets and tasks. AI dynamically adjusts its behavior to optimize outcomes and encompasses a suite of interconnected technologies designed to perform, enhance tasks, analyze data, facilitate interactions, and support decision-making processes. As the demand for human-like intelligence grows, AI can be regarded as a form of cognitive technology, signifying its capacity to replicate and enhance cognitive capabilities.

- AI technology boasts the distinct advantage of transcending geographical and temporal limitations, rendering it an essential asset for conducting large-scale data analysis (Liu et al., 2019). As an emerging information technology, AI holds the potential to amplify decision-making processes while curbing the reliance on human resources and associated expenses. The portability of mobile devices enables learners to access textbooks, complete exercises, and gather data conveniently. In parallel, AI-driven learning systems provide valuable learning guidance and supplementary materials, significantly enhancing the effectiveness of the learning experience (Liu et al., 2019). Furthermore, the integration of an increasing number of AI programs into e-learning environments is evident (Chassignol et al., 2018). These AI-enhanced e-learning (AieL) systems are adept at catering to students with diverse knowledge levels and individual characteristics. Such systems prove beneficial in scenarios encompassing staff training, knowledge updates, professional growth, and skill enhancement (Kavitha & Lohani, 2019). The integration of AI technology into educational settings holds the potential to reshape learning paradigms, making them more adaptable, personalized, and effective.
- Definition and History of AI: The literature often begins with a discussion of the definition of AI, emphasizing its ability to mimic human intelligence in various tasks. The term “Artificial Intelligence” was coined by John McCarthy in 1956, marking the inception of a new field of computer science. Researchers have since explored different approaches and techniques to achieve AI, including machine learning, natural language processing, and expert systems.
- AI Capabilities and Applications: The literature highlights the diverse capabilities of AI systems, including reasoning, knowledge acquisition, interaction, control, and object recognition. Researchers have developed AI algorithms and models that excel in specific tasks, such as image recognition, natural language understanding, and decision-making. AI has found applications in various domains, including healthcare, finance, transportation, and entertainment, transforming industries and enabling new possibilities.
- Computational Analysis and AI Behavior: Computational analysis is an essential aspect of understanding AI systems and their behavior. Researchers use computational methods to study how AI systems process information, make decisions, and adapt to different situations. This analysis helps uncover the underlying mechanisms and algorithms that drive AI behavior, providing insights into the strengths and limitations of AI systems.
- AI and Human Intelligence: The literature often discusses the relationship between AI and human intelligence. While AI aims to replicate or augment human intelligence, it is important to differentiate

between human intelligence and AI capabilities. Researchers explore the similarities and differences between human and artificial intelligence, highlighting the potential for AI to enhance human cognitive abilities and address complex challenges.

- **Societal Impact of AI:** The literature acknowledges the significant impact of AI on society. Discussions revolve around the potential benefits, such as increased efficiency, improved decision-making, and enhanced quality of life. However, researchers also address concerns related to AI, including job displacement, ethical considerations, and potential biases in AI systems. The societal implications of AI are explored through studies on employment patterns, income inequality, and the ethical development and deployment of AI technologies.
- **Future Directions and Challenges:** The literature often concludes with discussions on future directions and challenges in AI research. Researchers highlight the need for ongoing advancements in AI algorithms, data availability, and computing power to push the boundaries of AI capabilities. Additionally, ethical considerations, transparency, and accountability in AI systems are identified as critical areas for further exploration and development.

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Chapter 4: Research Method

Research Method

The research methodology for the study involved multiple complementary methodologies to collect a range of quantitative and qualitative data. Here is an overview of the key components of the research methodology:

The research process encompassed three primary stages:

- The identification of all pertinent articles focused on artificial intelligence within the targeted journals.
- The identification of relevant articles through scrutinizing the references listed in the articles discovered during the first stage.
- The identification of relevant articles by examining the collection of articles that cited the articles retained from both the initial and second stages.

The literature search was guided by a set of keywords extracted from the practitioner review. These keywords encompassed a broad spectrum of AI-related subjects, including artificial intelligence itself, as well as specific topics like speech recognition, image recognition, computational linguistics, natural language processing, image processing, video processing, knowledge representation, pattern recognition, machine learning, deep learning, robotics, expert systems, knowledge-based systems, dialogue systems, and intelligent agents

Researchers are encouraged to customize their publications to ensure they are easily comprehensible by practitioners and effectively fulfill their requirements. This is particularly important when delving into topics of significant interest and potentially high practical impact.

Ethical Approval

Ethical approval to conduct the research was granted by “**Fatma Mostafa**”. Participants’ consent was obtained by the researchers.

Quality Control

To ensure high-quality data, data quality checks were conducted. These checks aimed to identify respondents who displayed patterns of satisfaction or provided nonsensical responses. For example, respondents who frequently left questions unanswered or consistently chose the first or last option were flagged for further examination. These

nonsensical respondents were eliminated from the survey dataset prior to data weighting and analysis to maintain data integrity.

Survey Design

The research used a set of six questions designed to measure the impact of specific uses of AI in daily life. Each question had four possible responses, and an explicit fifth option was provided for respondents who were unsure or did not have a definitive answer. The questions were formulated to gather information on participants' awareness and perceptions regarding AI in their daily lives.

Data Collection

The data collection process involved the administration of an online survey. The survey was shared randomly through social media platforms to reach a broad audience. Participants were asked to respond to the set of questions provided in the survey. The survey responses were collected electronically, allowing for efficient data collection and storage.

Data Analysis

Once the data collection phase was completed, the collected responses were subjected to data analysis. The analysis involved both quantitative and qualitative methods, considering the nature of the data collected. Quantitative analysis techniques, such as descriptive statistics, may have been employed to summarize the responses and identify patterns or

trends. Additionally, qualitative analysis methods, such as thematic analysis, may have been used to explore and interpret participants' open-ended responses.

Survey Analysis

Basic Data Analysis

- Sample size: 113 individuals
- Number of questions: 11 questions

- The upcoming chapters containing 13 items (11 questions + 2 other observations items) was viewed and the questionnaire was analyzed as follows:

Results summary:

The mean, standard deviation, and percentage were calculated for each question.

Difference analysis:

The t-test was used to analyze the statistical differences between the data sets, and the data were compared using the confidence level (0.05) - (Provide details of t-test results if there are notable differences)

Sampling

- This study was conducted to understand how aware the citizens and residents of KSA are of artificial intelligence in their daily lives. The overall target population for this survey was (Number) persons ages 25 and older, living in the KSA, including non-Saudis from (Date), 2023. Everyone who took part in the survey is an adult and private or governmental employee. The online survey was shared randomly through social media. This research shows the questions used for this report, along with responses, and its methodology.
- For the selection of pertinent documents in this study, a search strategy akin to the one outlined by Dennis et al. (2016) was employed. This approach encompasses three primary search stages. Initially, we conducted a search on each company's official website using the term "artificial intelligence." Subsequently, we performed a Google search with the term "artificial intelligence," limiting the results to the specific domain of the company. This step was designed to uncover additional websites affiliated with the companies, beyond their primary sites (such as regional or country-specific websites). In the third stage, we conducted a Google search combining the "[company name]" with "artificial intelligence." The latter two stages aimed to identify any documents that might have been overlooked on the official websites of the organizations.
- All publicly accessible documents, including reports, white papers, magazines, and web pages, that conveyed insights into the viewpoints, vision, investments, projects, and AI applications of these companies were collected. Given the extensive assortment of documents stemming from the expansive search, our focus was narrowed down to documents, predominantly in PDF format, that bore an official endorsement from the organizations or were officially published on their respective websites.

Chapter 5: Results

Findings

Order of questions by Mean:

The questions were arranged in order of average from largest to smallest to determine the importance of each question.

Question Order	Sample direction	T Test	Percentage	Stdv	Mean	Sample size	Strongly Disagree	Disagree	Natural	Agree	Strongly Agree	Question No.
1	Agree	6.4128	73.3	1.10	3.66	113	4	14	21	51	23	4
2	Agree	5.0414	71.3	1.19	3.56	113	6	15	21	51	20	5
3	Agree	5.6321	71	1.03	3.54	113	3	16	29	46	19	11
4	Agree	3.7572	69.7	1.37	3.48	113	10	12	25	45	21	3
5	Agree	3.7507	69.2	1.30	3.46	113	7	19	21	47	19	10
6	Natural	3.5424	67.8	1.168	3.38	113	4	23	28	41	17	2

7	Natural	2.4833	66.7	1.43	3.33	113	10	18	29	36	20	8
8	Natural	1.7955	65.3	1.57	3.26	113	11	24	22	36	20	6
9	Natural	0.7162	61.8	1.31	3.08	113	9	28	34	28	14	9
10	Natural	-0.525	58.8	1.25	2.93	113	13	26	38	27	9	7
11	Natural	-1.446	55.8	1.56	2.78	113	22	27	26	29	9	1

Table (1): Order of questions by Mean.

Statistics

	Valid	Missing	Mean	Median	Std. Deviation	Variance
AI is limited in its abilities	113	0	2.79	3.00	1.250	1.562
have seen AI already impacting our current role in a positive way	113	0	3.39	4.00	1.081	1.168
have ethical concerns when it comes to AI and automation	113	0	3.49	4.00	1.173	1.377
I always thoughts on the potential of AI to replace some human jobs	113	0	3.66	4.00	1.049	1.100
Companies can be better with an AI-driven future	113	0	3.57	4.00	1.093	1.194

I feel confident with AI making decisions on behalf of humans Save translation	113	0	3.27	3.00	1.254	1.572
I think AI systems makes many error	113	0	2.94	3.00	1.120	1.255
People will suffer if AI is used more and more	113	0	3.34	3.00	1.200	1.439
I think AI is used to spy on people	113	0	3.09	3.00	1.146	1.314
I am interested in using AI in my daily life	113	0	3.46	4.00	1.142	1.304
AI can provide new economic opportunities for KSA	113	0	3.55	4.00	1.018	1.036

Table (2): Statistic

Conclusion

The number of people who participated in the questionnaire, and the number of males among them (89) and the number of females (24) which explains the greater societal awareness of males over females.

Gender					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	89	78.8	78.8	78.8
	Female	24	21.2	21.2	100.0
	Total	113	100.0	100.0	

Table (3): Awareness by Gender

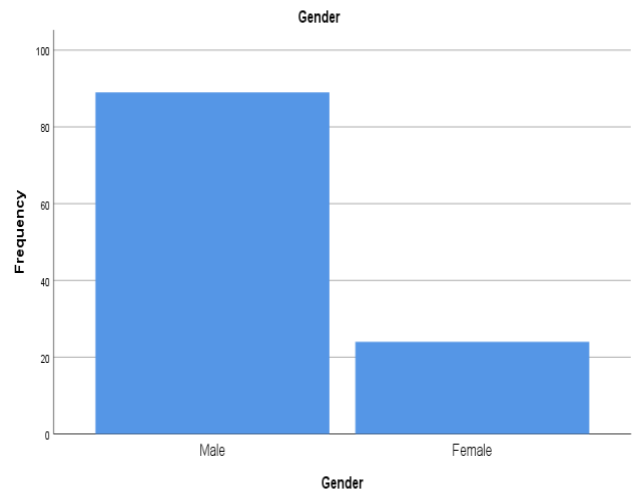


Figure (1): Awareness by Gender

We find that the rate of awareness of ages, which ranges between approximately 20:50 years, gradually decreases as the ages increase, and this indicates an increase in awareness of the emerging generations and its decrease as the age increases.

Age of people					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	20	29	25.7	25.7	25.7
	31	35	31.0	31.0	56.6
	40	30	26.5	26.5	83.2
	50	19	16.8	16.8	100.0
	Total	113	100.0	100.0	

Table (4): Awareness by Age

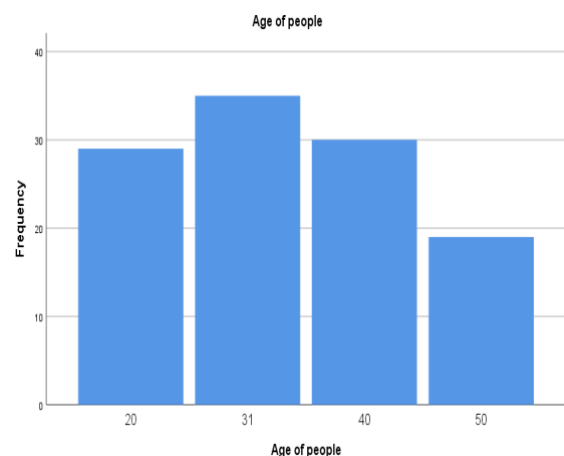


Figure (2): Awareness by Age

The distribution of the questionnaire in all regions of the Kingdom of Saudi Arabia shows a proportional distribution to some extent.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Central	32	28.3	28.3	28.3
	Eastern	16	14.2	14.2	42.5
	Northern	22	19.5	19.5	61.9
	Southern	20	17.7	17.7	79.6
	Western	23	20.4	20.4	100.0
	Total	113	100.0	100.0	

Zone

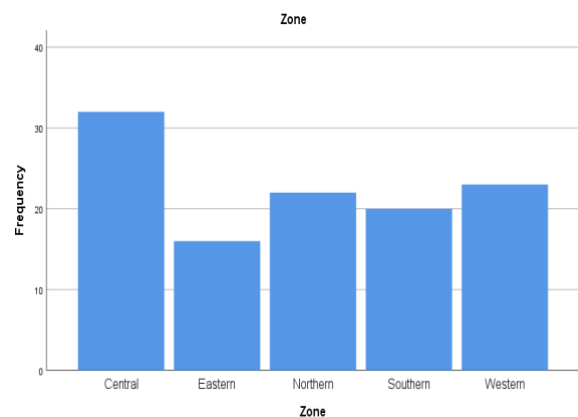


Table (5): Awareness by Distribution

Figure (3): Awareness by Distribution

The result of the questionnaire on those who work in private or government jobs and its increase over people who do not work in any jobs or freelance jobs is very different, and this indicates more interest in distributing the questionnaire to government and private interests.

Occupation of employees					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Government	46	40.7	40.7	40.7
	Not work	9	8.0	8.0	48.7
	Private	40	35.4	35.4	84.1
	Self-emp	18	15.9	15.9	100.0
	Total	113	100.0	100.0	

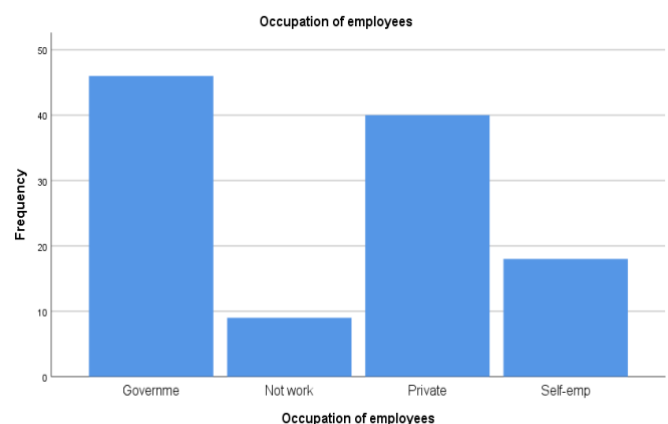


Table (6): Awareness by Occupation

Figure (4): Awareness by Occupation

The number of years of experience, we find that the more years of experience, the less participation, and this is considered normal because the more experienced people and managers are fewer in number compared to the number of employees, whose experience is less.

Years of work experience				
		Frequency	Percent	Cumulative Percent
Valid	4	32	28.3	28.3
	10	35	31.0	59.3
	15	24	21.2	80.5
	20	13	11.5	92.0
	25	9	8.0	100.0
Total		113	100.0	

Table (7): Awareness by Work

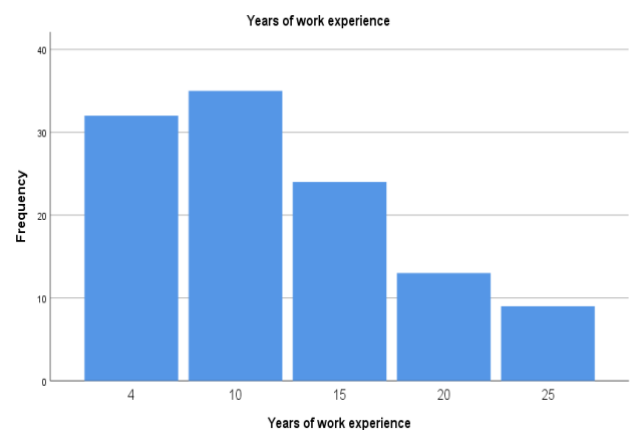


Figure (5): Awareness by Work Experience

The educational level, we find, is relatively commensurate with the years of experience in terms of the lack of participation for master's and doctoral holders, due to the limited numbers of graduates of universities and secondary schools, in which there are large numbers of students, or this is considered normal.

Education				
		Frequency	Percent	Cumulative Percent
Valid	Highschool	27	23.9	24.1
	Bachelor's	56	49.6	74.1
	Masters	20	17.7	92.0
	PhD	9	8.0	100.0
Total		112	99.1	
Missing	System	1	.9	
Total		113	100.0	

Table (8): Awareness by Education

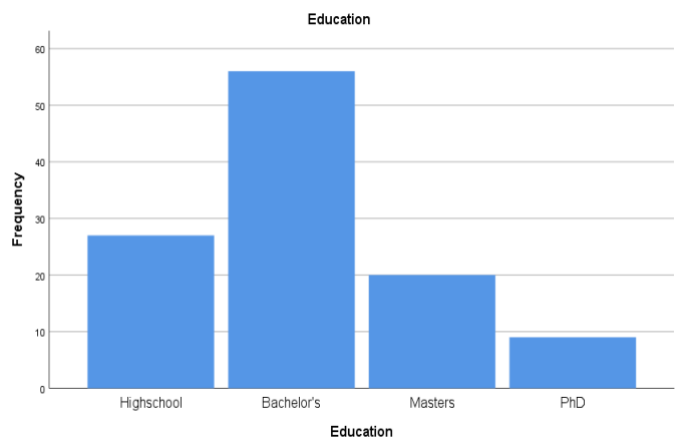


Figure (6): Awareness by Education

After conducting the analyzes and obtaining the values of the mean, the standard deviation, and the percentage for each value, and comparing the average value with the value of (T TEST) and determining the direction of the sample, the questionnaire data was rearranged from highest to lowest, according to what was shown in Table 1, and its analysis was as follows:

- The first question of interest to the respondents is question No. (4. I always thoughts on the potential of AI to replace some human jobs) and the result was in (Agree) with a percentage of (73.3%).
- The second question of interest to the respondents is question No. (5 Companies can be better with an AI-driven future) and the result was in (Agree) with a percentage of (71.3%).
- The third question of interest to the respondents is question No. (11. AI can provide new economic opportunities for KSA) and the result was in (Agree) with a percentage of (71%).
- The fourth question of interest to the respondents is question No. (3. I have ethical concerns when it comes to AI and automation) and the result was in (Agree) with a percentage of (69.7%).
- The fifth question of interest to the respondents is question No. (10. I am interested in using AI in my daily life) and the result was in (Agree) with a percentage of (69.2%).
- The sixth question of interest to the respondents is question No. (2. I have seen AI already impacting our current role in a positive way) and the result was in (Natural) with a percentage of (67.8%).
- The seventh question of interest to the respondents is question No. (8. People will suffer if AI is used more and more) and the result was in (Natural) with a percentage of (66.7%).
- The eighth question of interest to the respondents is question No. (6. I feel confident with AI making decisions on behalf of humans Save translation) and the result was in agreement with a percentage of (65.3%).
- The ninth question of interest to the respondents is question No. (9. I think AI is used to spy on people) and the result was in agreement with a percentage of (61.7%).
- The tenth question of interest to the respondents is question No. (7. I think AI systems makes many error) and the result was in agreement with a percentage of (58.8%).
- The eleventh question of interest to the respondents is question No. (1 AI is limited in its abilities) and the result was in agreement with a percentage of (55.8%).

Recommendation

- First, with regard to the gender factor, awareness campaigns for females should be increased and their knowledge of artificial intelligence and what are its pros and cons, and its various uses should be increased.
- For the coefficient of the Region, ages, Experiences and educational qualifications, these are considered normal rates.
- With regard to the coefficient of dependence on the type of job, it is necessary to rely on all working groups to determine the maximum knowledge of the subject under study, in addition to identifying deficiencies and working on them.
- With regard to the data subject of the questionnaire, we find that there is a fear that artificial intelligence will replace humans, and this carries a large degree of agreement among the respondents in the study, but there is an understanding of the role of artificial intelligence in the development of fields in general in the Kingdom of Saudi Arabia, as well as knowing the limits of the risks of its uses.

Implications for Future Research

- Longitudinal Studies: Future research could employ longitudinal designs to track changes in AI awareness, perceptions, and daily life practices over time. This would provide a more comprehensive understanding of the dynamic nature of AI's impact.
- Diverse Sample: Conducting research with a more diverse sample, including participants from various age groups, educational backgrounds, and geographic locations, would help broaden the generalizability of the findings.
- Mixed Methods Approach: Combining quantitative and qualitative methods in future studies would provide a more in-depth understanding of participants' experiences and allow for richer insights into the impact of AI on daily life practices.
- Experimental Designs: The inclusion of experimental designs, such as control groups or randomized interventions, would enable researchers to establish causal relationships between AI usage and daily life practices, controlling for potential confounding factors.
- Comparative Studies: Comparative studies across different countries or cultural contexts would help identify similarities and differences in AI awareness, perceptions, and practices, providing a more global perspective on the topic.

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Chapter 7: Appendices

Survey Questions

قياس وعي المجتمع السعودي بممارسات اليومية للذكاء الاصطناعي
Measure the KSA society awareness in Artificial Intelligence (AI) daily activities

عزيزي المستجيب ،
نحن مرشحون للماستر (الإدارة) في جامعة Everyone's Smart. حاليا ، لفحص هذه الدراسة تهدف إلى إجراء دراسة بعنوان
"قياس وعي المجتمع السعودي بممارسات اليومية للذكاء الاصطناعي"
أود أن أطلب تعاونكم للإجابة على هذا الاستبيان. سيتم الاحتفاظ بسرية أي معلومات يتم الحصول عليها واستخدامها للأغراض الأكاديمية فقط. نقدر تعاونك كثيرا.
شكراً لك مقدماً على موافقتك على المشاركة في هذه الدراسة.

,Dear Respondent
We are master's candidates (Management) at the Everyone's Smart University. Currently, we are conducting a study titled
"Measure the KSA society awareness in Artificial Intelligence (AI) daily activities"
I would like to request your cooperation to answer this questionnaire. Any information obtained will be kept confidential and only used for academic purposes. Your cooperation is highly appreciated.
.Thank you in advance for agreeing to participate in this study

bmhmoud@gmail.com [Switch accounts](#)



Not shared

* Indicates required question

* الجنسية Nationality

- ☐ سعودي Saudi
- ☐ غير سعودي Non-Saudi

* المنطقة Region

- ☐ Central region الوسطى
- ☐ Western region الغربية
- ☐ Eastern region الشرقية
- ☐ Northern region الشمالية
- ☐ Southern region الجنوبية

Gender الجنس *

☐ Female أنثى

☐ Male ذكر

Age العمر *

☐ 20-30

☐ 31-39

☐ 40-49

☐ 50+

Education التعليم *

☐ Highschool ثانوي

☐ Bachelor's degree بكالوريوس

☐ Masters degree ماجستير

☐ PhD دكتوراة

☐ Other: _____

* قطاع التوظيف Occupation

- ☐ Government حكومي
- ☐ Private خاص
- ☐ Self-employed توظيف ذاتي
- ☐ Not working لا أعمل
- ☐ Other: _____

* عدد سنوات خبرة العمل Years of work experience

- ☐ less than 5 yers أقل من ٥ سنوات
- ☐ 5-10 years سنة
- ☐ 10-15 years سنة
- ☐ 15-20 years سنة
- ☐ 20+ years سنة

Next

Clear form

قياس وعي المجتمع السعودي بممارسات اليومية للذكاء الاصطناعي
Measure the KSA society awareness in Artificial Intelligence (AI) daily activities

bmhmoud@gmail.com [Switch accounts](#)
 Not shared

* Indicates required question

قياس وعي المجتمع السعودي بممارسات اليومية للذكاء الاصطناعي
Measure the KSA society awareness in Artificial Intelligence (AI) daily activities

* Please indicate your degree of agreement or disagreement with the following statements

	Strongly Disagree غير موافق بشدة	Disagree غير موافق	Natural محايد	Agree موافق	Strongly Agree موافق بشدة
الذكاء الاصطناعي محدود في قدراته AI is limited in its abilities	☐	☐	☐	☐	☐
I have seen AI already impacting our current role in a positive way لمست الذكاء الاصطناعي في دورنا الحالي بطريقة إيجابية	☐	☐	☐	☐	☐
I have ethical concerns when it comes to AI and automation لدي مخاوف أخلاقية بالذكاء الاصطناعي والأتمتة	☐	☐	☐	☐	☐

I always
thoughts on the
potential of AI
to replace
some human
jobs أفكر دائماً في
إمكانات الذكاء
الاصطناعي ليحل
محل بعض الوظائف
البشرية

☐ ☐ ☐ ☐ ☐

Companies can
be better with
an AI-driven
future يمكن
للشركات أن تكون
أفضل مع مستقبل
يحرره الذكاء
الاصطناعي

☐ ☐ ☐ ☐ ☐

I feel confident
with AI making
decisions on
behalf of
humans Save
translation أشعر
بالتقنة في اتخاذ الذكاء
الاصطناعي للقرارات
نيابة عن البشر

☐ ☐ ☐ ☐ ☐

أعتقد أن أنظمة الذكاء
الاصطناعي ترتكب
العديد من الأخطاء
I think AI
systems makes
many error

☐ ☐ ☐ ☐ ☐

People will
suffer if AI is
used more and
more سيعاني الناس
إذا تم استخدام الذكاء
الاصطناعي أكثر
فأكثر

☐ ☐ ☐ ☐ ☐

أعتقد أن الذكاء
الاصطناعي يستخدم
| للتجسس على الناس
I think AI is used
to spy on
people

☐ ☐ ☐ ☐ ☐

أنا مهتم باستخدام
الذكاء الاصطناعي في
حياتي اليومية I am
interested in
using AI in my
daily life

☐☐☐☐☐

AI can provide
new economic
opportunities
for KSA يمكن أن
يوفر الذكاء
الاصطناعي فرصاً
اقتصادية جديدة لمملكة

☐☐☐☐☐

Please provide any other comments regarding this study.

يرجى تقديم أي تعليقات أخرى بخصوص هذه الدراسة

Your answer

Please provide any comments regarding any aspect that appears to be lacking in this study

يرجى تقديم أي ملاحظات بشأن أي جانب يبدو أنه غير مكتمل في هذه الدراسة

Your answer

Back

Submit

Clear form

Never submit passwords through Google Forms.

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Online Survey is Available
[here](#)