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The Impact of Harnessing Innovation on Solving AI Issues by using AI

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A B S T R A C T

This study focuses on how innovation might be used to solve AI problems in the particular setting of the United Arab Emirates (UAE). With the backdrop of a dynamic and culturally diverse business sector, the study seeks to bridge a significant research gap by providing a quantitative analysis of how leveraging innovation elements—such as workplace policies, leadership styles, and cultural diversity—affects AI problem-solving. A descriptive study was conducted in the United Arab Emirates, utilizing a sample of fifty individuals from various sectors and companies. The study looks at the connections between the variables that determine how AI solves problems. The UAE may see changes in workplace procedures as a result of this research, which would help the country's status as a major international commercial center. The results demonstrate that organizational digital transformation, which has an impact on several aspects of work and productivity, can have a significant impact on the resolution of AI-related problems. This study looks into five important factors that could be impacted by organizational digital transformation when it comes to using AI to solve problems.

1. INTRODUCTION

Every organization's success is greatly influenced by the performance of its employees. Even though there are many variables that affect an employee's performance, the organization's effect on its workforce is one of the most important ones. To advance workplace productivity and employee wellbeing, it is critical to comprehend how organizations in the United Arab Emirates impact employee performance. The goal of the study is to look into the complex relationship that exists between employers and employees [1], [2], [3].

This study's main goal is to look into how organizations and AI work together to solve problems in the United Arab Emirates. Our goal is to identify the fundamental processes that either support or undermine worker productivity and job happiness. Insights from this study will help firms in the United Arab Emirates adopt more sensible policies and strategies to maximize AI's ability to solve problems, improve workplace conditions, and ultimately meet their objectives for harnessing innovation [4]–[6].

Despite this, the UAE's economy is expanding and it is seen as an attractive travel destination. They are having trouble keeping up with and improving AI's ability to solve problems. Leadership philosophies, workplace regulations, and the work culture in the United Arab Emirates are just a few of the harnessing innovative variables that can have an impact on employee satisfaction, motivation, and general well-being [7]–[9]. This study aims to address the complexity of these factors and their necessity for knowledge [10]–[13].

An online survey will be employed in a descriptive study [10], [13]. In addition to summarizing

pertinent academic and industry studies, we will interact with a sample size of fifty individuals from various industries and organizations in the United Arab Emirates to gain first-hand experiences and viewpoints. This all-encompassing strategy will offer a thorough grasp of how innovation leveraging affects AI problem-solving in the United Arab Emirates [8], [14]–[16].

Gaining insight into how UAE firms use AI to solve problems has larger implications for the country's economic development and international competitiveness [17]. It helps companies create environments that support productivity, health, and creativity, contributing to the UAE's growth as a significant hub for global trade. A deeper look at how businesses use AI to solve problems is necessary given the UAE's diverse workforce and dynamic business climate [18]–[20]. Maintaining high employee satisfaction and engagement is essential for corporate success, thus it is imperative to understand the elements at play. The goal of research is to provide insights that help businesses create more productive and satisfying work environments. To support the UAE's sustained economic growth and global relevance, this all-encompassing method evaluates the relationship between businesses and AI-based problem-solving in the nation.

2. LITERATURE REVIEW

This study was conducted in Indonesia by [9], [21], [22] utilizing the Proportionate Stratified Random Sampling method with a sample size of 155 personnel. In order to investigate the effects of motivation, leadership, and leveraging innovation culture as separate variables on job satisfaction (JS) and using AI to solve problems, the researchers used artificial intelligence (EP) [19], [23], [24]. The results show that while these independent characteristics had no effect on job happiness, they did have a positive and noticeable effect on employee performance [25]–[27].

Saturation sampling was used in the research, which was conducted in Indonesia with 211 participants out of a total of 241 [28], [29]. As independent factors, the authors looked at innovation support (OS), innovation commitment (OC), and innovation citizenship behavior. The results of the investigation demonstrate that these independent criteria helped AI solve problems.

[23], [25] used a sample size of 252 people and was carried out in Iraq. Transformational leadership was employed by the author as an independent variable. The results of the study show that transformative leaders and AI's ability to solve problems are positively correlated.

[30]–[33] This study was conducted by using a 350-person sample that was gathered using an explanatory survey. The author employed intercultural competencies, innovation commitment, and innovation fairness as independent variables. The study's findings show that, of the variables looked at, only leveraging innovation commitment had a direct impact on solving AI issues [34].

With a sample size of 105 employees, conducted in [35]. The writers made use of staff competencies, human resource flexibility, Job satisfaction and the adoption of an innovation-friendly culture were used as the study's independent variables. The study's findings show that three of the four independent variables have a significant impact on how well AI solves problems.

Using a sample of 180 people, [36], [37] conducted the utilization of innovation support as an independent variable, employee attitude as a mediating variable, and innovation justice as a moderating variable was employed by the authors. The study's conclusion is that using innovation support has a beneficial impact on how well AI solves problems.

Using a sample size of 326 useable cases, [1], [38]–[40] conducted the study in Pakistan. The two independent variables that the authors used were entrepreneurial orientation and leveraging innovation culture [6], [41], [42]. The results of the study show that just one of the two independent variables has a beneficial impact on AI's ability to solve problems [43].

[44], [45] Using a sample of 547 employees, the study was carried out in Vietnam. Using innovation commitment as an independent variable was done by the author. The hypothesis-driven research's conclusion demonstrates that raising organizational commitment to enhance work performance can boost job satisfaction, which in turn leads to better solving AI issues [46].

The study was carried out in Iran with a sample size of 173 utilizing a questionnaire survey[2], [3],

[47], [48]. The authors employed the concept of harnessing innovation commitment as a mediating variable and authentic leadership as an independent variable [29], [49]–[51]. The study's findings demonstrate the substantial influence that AI has on both leveraging innovation commitment from real leadership and resolving AI-related problems.

The research was conducted by [11], [12], [18], [52] using a proportionate random sample technique with 130 personnel. Utilizing innovative learning served as an independent variable for the researchers. However, the mediating variables that were used were job happiness and harnessing innovation commitment [53]. The study's conclusions showed that while utilizing innovation learning improved job satisfaction and innovation commitment, worker productivity was not significantly impacted. But commitment to embracing innovation and job happiness did show a strong correlation with worker productivity [26], [54], [55].

Goals

The objectives of this study are to: • Identify the external elements affecting an employee's performance in UAE organizations; • Identify the internal factors influencing an employee's performance in UAE organizations; and • Identify the tangible aspects influencing an employee's performance in UAE businesses.

A gap in the research

The study's focus on the particular UAE setting, where leveraging innovation elements impacting AI problem-solving may differ from other countries, creates a research gap. In the end, this study intends to close a significant knowledge vacuum in the field by examining unknown variables and their long-term consequences, broadening the sample diversity, and taking employee well-being into account [22], [56], [57].

3. METHODOLOGY

3.1 Design of Research

The methodology used in this study combines quantitative and qualitative approaches to produce its results. The researcher has paid careful attention to examining the topic matter in the introduction and literature review parts, which are where the qualitative aspect is most noticeable. A survey is also used as part of the research's quantitative component.

3.2 Sample

This study has a sample size of fifty, comprising personnel from various firms as well as some in the United Arab Emirates. On the other hand, because of time restrictions, convenience sampling is used in the research.

3.3 Research Questions

RQ1) How much do you think your dedication to the company affects how well you perform at work?

RQ2) Does a leader's style affect how AI in the UAE solves problems?

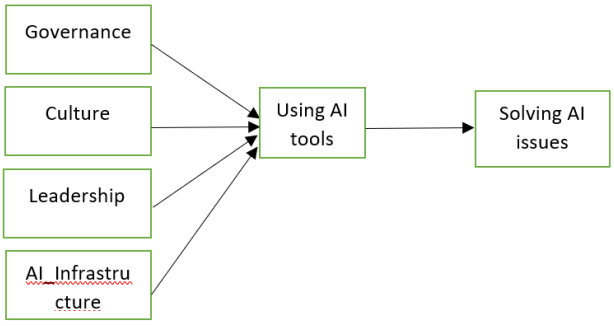
RQ3) What impact does your workplace's innovation-harvesting culture have on your ability to do your job?

RQ4) Do you believe that your general mindset and level of job satisfaction affect how well you perform at work?

RQ5) How frequently does your performance on the job depend on the level of assistance you receive from the organization?

3.4 Conceptual Framework

Variables	Variable Type	Variable Category
Organizational digital transformation Commitment	Independent	Demographic
Leadership Styles	Independent	Demographic
Organizational digital transformation Culture	Independent	Demographic
Employee Attitude	Independent	Demographic
Organizational digital transformation Support	Independent	Demographic
Employee Performance	Dependent	Dichotomous



Theory

H0(RQ1): "An individual's commitment to the

organization and their solving AI issues do not significantly correlate."
H1(RQ1): "An individual's commitment to the organization and their solving AI issues are significantly correlated."
H0(RQ2): "Leadership style has no appreciable influence on AI in the UAE solving problems."
H1(RQ2): "Leadership style has a major influence on AI in the UAE addressing problems.
H0(RQ3): There is no discernible effect of fostering an innovative culture at work on employee performance.
H1(RQ3): "Solving AI issues is significantly impacted by the workplace's utilization of innovation culture."
H0(RQ4): "A person's overall attitude, job satisfaction, and solving AI issues are not significantly correlated."
H1(RQ4): "A person's general attitude, level of job satisfaction, and solving AI issues are significantly correlated."
H0(RQ5): "Work performance is not significantly impacted by the organization's level of support."
H1(RQ5): "Work performance is significantly impacted by the organization's level of support."
Moral Aspects to Take into Account.
• Before any data is collected, all volunteers will be made aware of the goals of the study, the methods used, and any possible risks or advantages.
• The participants' private information will be safely stored, and only the researcher with permission will be able to access it [10], [13].
The study will be carried out with honesty and integrity, and it will apply for ethical approval from the institution where the survey will be carried out.

4. DATA COLLECTION

Data collecting involves many different procedures, which are often classified into quantitative and qualitative methods. Three popular types of quantitative research include observational studies, experiments, and surveys. Surveys employ standardized questionnaires to gather information on participants' attitudes, behaviors, and characteristics in a methodical manner. On the other hand, studies alter variables in a controlled setting to observe cause-and-effect correlations, revealing causal relationships. Because observational research carefully observes and records activities in natural settings without intervention, it makes real-world events easier to understand.
Quantitative data collecting was used in this study. Whats app was used to submit the link to an online survey that used a Google Forms URL to collect data. Since the survey will only be administered once, there will only be one frequency.
Taking Samples
Samples can be classified as either non-probability or probability. Probability sampling enhances representativeness by ensuring that every member of a population has an equal chance of being selected for the sample. Common types include simple random sampling, stratified random sampling, cluster sampling, and systematic sampling. Because the sample size of 50 was chosen at random and was modest owing to time restrictions, simple random sampling was employed in this study.
basic random sampling Whether they are replaced or not, every frame member and object in the selection has an identical probability. Samples are created using random number tables or computer generators [1].
Using stratified random sampling The population is split into subgroups (referred to as strata) based on certain characteristics, and random samples are selected from each to guarantee representation from a variety of segments.
Cluster sampling: A random selection is made from the clusters created by the population's partition. Either all of the items in the designated clusters are used, or different probability strategies are employed to choose the items. One scenario where cluster sampling is often used is during election exit polls.
methodical sampling Establish the sample size (n), split the N people into groups of k (k=N/n), choose one person at random from the first group, and then choose each of the next k people.

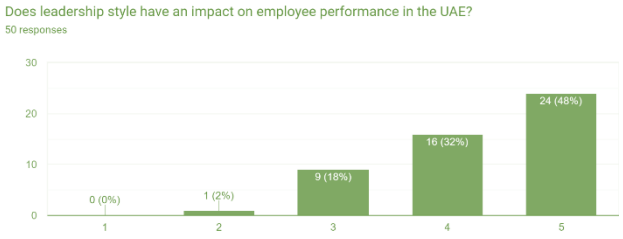
5. DATA ANALYSIS AND DISCUSSION

5.1 Types of Data Analysis

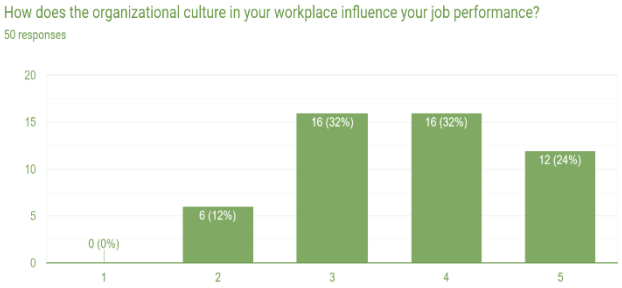
Reporting Study: After data has been gathered by an outside source, business researchers are responsible for gathering and analyzing it.
Descriptive Study: A business researcher aims to find answers to questions concerning who, what, when, where, and how in a descriptive study.
Explanatory Study: Explanatory research aims to clarify the causes of a phenomenon that was

previously noted in descriptive research.
Predictive Study: This type of study emphasizes the need for easily accessible historical data for research objectives by using historical data to project future outcomes.
This study employed a descriptive methodology, carefully collecting, organizing, and summarizing data. It places a strong emphasis on answering the questions of who, what, when, where, and how in order to give a comprehensive understanding of the subject being studied.

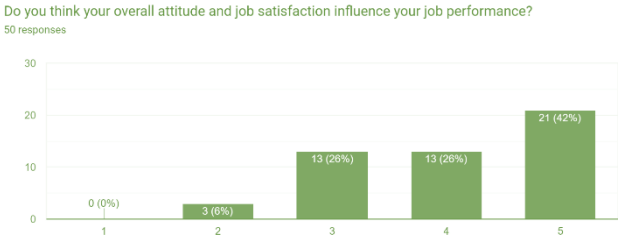
Interval scale questions, with 1 denoting strong disagreement and 5 denoting strong agreement, are shown in the above chart. According to the results, 46% of respondents agreed, 14% were neutral, and 4% disagreed overall. 82% of respondents overall concur that commitment affects work performance.



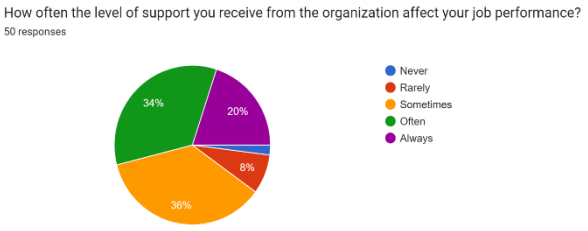
Interval scale questions, with 1 denoting strong disagreement and 5 denoting strong agreement, are shown in the above chart. The findings indicate that 48% of respondents gave extremely high answers, 18% gave neutral answers, and 2% gave low answers when asked how leadership affected AI's ability to solve problems [16], [25].



Interval scale questions, with 1 denoting strong disagreement and 5 denoting strong agreement, are shown in the above chart. The results indicate that 32% of respondents are neutral and agree, but when we include the results, we find that 56% of respondents agree and 12% disagree—the lowest percentage of respondents who believe that fostering an innovative culture affects solving AI issues [8], [9].



Interval scale questions, with 1 denoting strong disagreement and 5 denoting strong agreement, are shown in the above chart. The results indicate that 42% of respondents strongly agree, whereas 2% disagree, and 26% are ambivalent about the impact of attitude on solving AI issues.

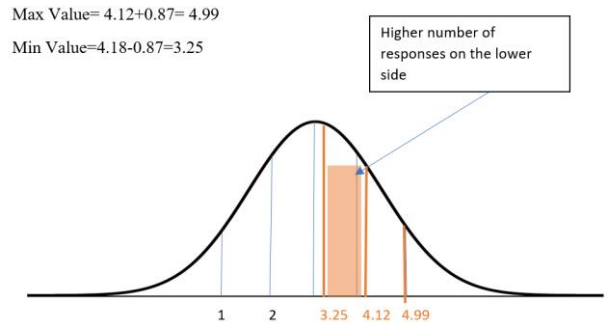


The pie chart illustrates how the degree of assistance has an impact on solving AI issues. A large number of responses (36%) were selected occasionally, 34% frequently, 20% usually, 8% infrequently, and the lowest response (2% never) [6], [29].

Descriptive Analysis

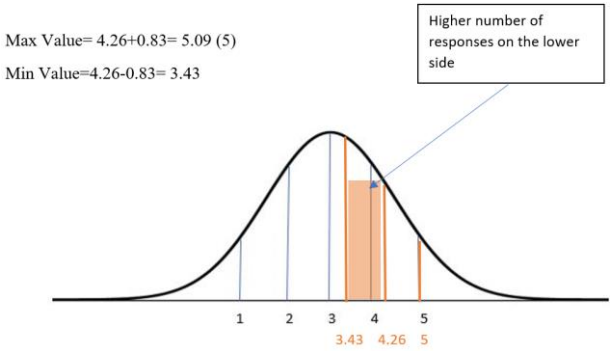
The terms mean, standard deviation, and skewness are employed in this descriptive study to indicate average, data variability, and distribution asymmetry, respectively [23]. When combined, these metrics offer a succinct summary of a dataset's distribution shape, variability, and central tendency.

Commitment	
Mean	4.12
Standard Deviation	0.87
Skewness	-1.20



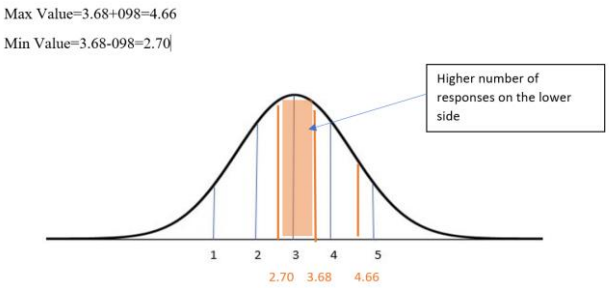
The statistical analysis indicates that the mean is 4.12, the minimum value is 3.25, and the maximum value is 4.99. According to statistics, a large percentage of replies fall between 3.25 and 4.12, which supports the hypothesis that "H0: There is no significant relationship between an individual's commitment to the organization and their solving AI issues is accepted."

leadership style	
Mean	4.26
Standard Deviation	0.83
Skewness	-0.75



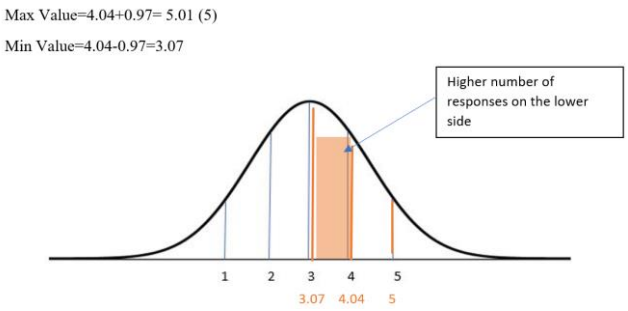
The statistical analysis indicates that the mean is 4.26, the minimum value is 3.43, and the maximum value is 5. The data indicates that a large proportion of the replies fall between 3.43 and 4.26, supporting the hypothesis that "H0: There is no significant impact of leadership style on solving AI issues by AI in the UAE is accepted."

Harnessing Innovation Culture	
Mean	3.68
Standard Deviation	0.98
Skewness	-0.12



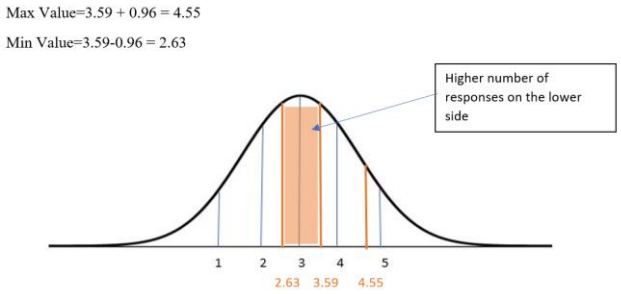
The statistical analysis indicates that the mean is 3.68, the minimum value is 2.70, and the maximum value is 4.66. It is acknowledged that "H0: Harnessing innovation culture in the workplace has no significant influence on solving AI issues" because a large percentage of the responses fall between 2.70 and 3.68.

Attitude and job satisfaction influence	
Mean	4.04
Standard Deviation	0.97
Skewness	-0.50



The statistical analysis indicates that the mean is 4.04, the minimum value is 3.07, and the maximum value is 5. Since a large percentage of replies fall between 3.07 and 4.04 on the statistical scale, it can be concluded that "H0: There is no significant relationship between an individual's overall attitude and job satisfaction and their solving AI issues is accepted."

Support	
Mean	3.59
Standard Deviation	0.96
Skewness	-0.27



The statistical analysis indicates that the mean is 3.59, the minimum value is 2.63, and the maximum value is 4.55. Since a large percentage of replies fall between 3.63 and 3.59 on the statistical scale, it is acknowledged that "H0: The level of support from the organization does not significantly affect solving AI issues."

6. CONCLUSION

The research's findings support the hypothesis, which states that using AI in the UAE to solve problems is positively correlated with leveraging innovation [5], [12], [14]. The subsequent findings indicate that every variable creates a void in the scope of this research for further investigation.

• Commitment: Promote employee commitment for better job performance through career development, engagement programs, and recognition.

• Leadership Style: Invest in leadership training to create a transformative style that encourages and inspires staff development.

• Applying creativity Culture: To have a comparatively positive effect on work performance, strengthen positive cultural components through increased cooperation and communication.

• Attitude and Job Happiness: Prioritize creating a positive work atmosphere in order to resolve issues and raise overall job satisfaction since these two factors will significantly affect job performance.

• Level of promote: Employers may enhance job performance and foster innovation in the workplace by offering improved tools, regular feedback, and a supportive atmosphere.

Organizational digital transformation has the potential to significantly improve AI problem-solving, as well as productivity and other areas of the workplace. Digital transformation can have an impact on the five important variables in this study that are related to using AI to solve problems. By automating monotonous tasks and utilizing digital tools to streamline procedures, employees can focus on higher-value work [20], [21], [28]. Enhanced efficiency leads to higher productivity since employees can finish tasks more quickly and with fewer errors. Because information is freely accessible thanks to digital tools, employees are able to make better decisions. Real-time data and analytics enable the resolution of AI problems through AI monitoring, improvement identification, and data-driven decision making [4], [19], [22]. Modern digital workplaces with collaborative features and intuitive interfaces lead to happier employees. Engaged workers are typically more innovative, successful, and committed to the company's success. Digital transformation can lead to employee empowerment by giving them more influence over work processes and environment. Staff workers have more control over their job thanks to self-service technologies and portals, which increases

motivation and autonomy [11], [15], [18].

While AI-assisted problem solving is generally improved by digital transformation, its effective implementation requires constant training, effective change management, and an innovative, forward-thinking business culture. During the process of transformation, it is imperative to take into account the distinct needs and concerns of the labor force to ensure a smooth transition and maximize the benefits for both the organization and its employees [2], [3].

From the above, it could be concluded that the structural design of super apps is extremely simple and it offers a simple platform of commitment. This platform not only presents entertainment but also assists in accomplishing varied types of important official transactions like bill payments, loan sanctions, EMI payments etc. All these activities can be attained from a single application with the use of unique functionalities of the application. Due to the presence of such types of facilities, most of the institutions, government or private are introducing their super apps to engage more and more users. Thus, a wide range of customers is signing into these apps to make life simple and hassle-free. However, to boost the preferences of super apps, they need to be designed in such a way that it becomes very simple to handle and access.

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