



# The Impact of Employee Diversity on Project Management Work Performance: A Case Study

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## ABSTRACT

The objective of this study is to ascertain the impact of workforce diversity on performance in the "Sharjah Coup" scenario. Motivation is a crucial factor that significantly impacts employees' productivity and overall success. These factors have a substantial impact on the adoption of gender diversity, age diversity, ethical diversity, and employee performance in the "Sharjah Coup" industry. This study aims to assess the present extent of the influence of diversity on employee performance in the retail industry in the United Arab Emirates. It will investigate any existing gaps in the literature and establish research objectives and inquiries that will enhance our comprehension of how diversity impacts employee performance in this particular context. The study relies on data selected randomly from three prominent stores in the United Arab Emirates (Abu Dhabi Cooperative Society, Sharjah Cooperative Society, and Ajman Markets Cooperative Society). The study sample consists of 100 people, and the sampling technique utilized in this instance is a probability sample. All of the employees' gender, ages, and ethnicities were taken into account when choosing the sample, among other variables. Therefore, information must be collected from workers who belong to these categories. The presence of a diverse workforce is a crucial determinant of performance and, ultimately, the success of the "Sharjah Coop" sector. A study highlighted the significance of age, gender, and race/diversity in influencing performance in a dynamic context. This investigation also uncovers a notable lack of knowledge pertaining to the "Sharjah coop". To improve industrial performance and boost employee satisfaction. The study demonstrates that diverse kinds and performances in the Sharjah Cooperative have a strong correlation. Nonetheless, the UAE is facing an increasing number of diversity-related issues. Regulations and efficient organizational management can help overcome this.

## 1. INTRODUCTION

The borders of all countries have been opened due to liberalization and globalization. Diversity among peoples in one place has become a very natural thing, and everyone has become accustomed to it. Everyone can work anywhere in the world. This has led to functional diversity in work environments in terms of race, gender, age, and more differences in personal characteristics. As we

know, the workforce is considered one of the company's biggest assets [1]. Through machines, you can easily reach the revenues you aspire to, but you cannot reach the workforce with this ease. As you know, management must provide complete care, attention, and employee requirements to achieve impressive work results [2]. Each employee has a different ability to make a

difference and influence the productivity and growth of the organization, in addition to gaining and maintaining customer satisfaction [3]–[6]. On the other hand, management must constantly review and examine the values of each member of the organization because there is functional difference and diversity, as we talked about in the workforce [7]. The workforce must be managed properly; otherwise, this will greatly affect the ineffective utilization of employees in terms of race, gender, religion, culture, etc. As we know, the organization always aspires to obtain the best performance and the best results. Therefore, the skills, knowledge, and workforce must be improved [8]–[11]. In this way, the workforce becomes prepared and ready to accept all types of challenges. Through this, we know that sound management of employees leads to the success and achievement of all the organization's goals. Management must accept that the social work environment affects the employee as well as his performance, and thus the employee will be able to develop himself and his performance. This also affects the employee's increased self-confidence, and he will have effective communication skills [12]–[15].

The diversity of the work force led to a number of problems with the organization's productivity. When this variety is handled improperly, it can result in power struggles, misunderstandings, emotional confrontations, and other problems. There are several key factors to diversity, Age diversity is one of the major components of diversity, as different age groups perform tasks differently [16]–[19]. Additionally, the performance methodology varies in terms of gender diversity. For instance, the performance of the entire organization will suffer because women are unable to work nights and this will negatively affect [20]. Most international organizations have different employees from many countries, ethnic diversity is impact in Employee performance since staff in most multinational corporations come from a variety of nations. Additionally, to the employees' varying levels of education. Employees in the same department may hold degrees in the same field, which will cause a correlation between educational variety and performance [21]–[24]. The United Arab Emirates is regarded as one of the nations that offers a big number of career opportunities

and has a very diversified workforce". UAE labor laws and policies continue to draw visitors from all over the world. Sharjah Coop is one of the companies in the UAE with the greatest levels of employee diversity and productivity [25]–[27]. "Different sorts of diversity exist, including those based on age, color, gender, and education. The purpose of this study is to determine how and to what degree employee performance is impacted by diversity. The opening hours of coop range from 10 to 12 hours. As a result, it requires more workers to cover shifts because each employee is required to cover at least two shifts [28]–[31]. Recent issues with improperly allocating work hours among employees have come to emerged, with female workers experiencing gender discrimination such as being required to perform night shifts. The foundation of this research is a knowledge of how diversity affects employee performance k in the UAE, particularly in coop [32]–[34].

## 2. LITERATURE REVIEW

An organization's most valuable asset is its Manpower, and employee performance is the one factor that determines whether the business succeeds. In order to ensure that the organization's objectives are met, it is imperative to take into account the significance of managing workforce diversity [35]–[37]. In 1998, Janelle spoke in a research paper on organizational change, and that it showed better results in a large government organization. It is necessary to deal with and train employees regardless of their gender, race, or nationality with the support of experienced consultants to increase the profits of the organization [1], [38], [39]. "Studied the relationship between ethnic diversity and employee performance by considering the work period of the account team as the role of mediator and considering the mediator diversity in work value". The result of this study was that there is no relationship between performance and diversity of work value.

According to [3], [4], [40], [41], some stages of ethnic diversity may cause creativity, innovation, and e development, but when the level of ethnic diversity increases, it can lead to parties and tension among employees due to social classifications [8], [9], [42], [43].

According to [10], [11], [44], [45], ethnicity can be used as stand-in for ethnic diversity and the context of culture, which can be pretend it for innovative and superior outcomes.

**2.1 Age diversity and employee performance**

According [12], [15], [46], [47], conducted research to determine the effect of age diversity on the performance of employees in the organization. To investigate empirical associations between these variables, he selected a sample of 147 organizations [26], [27], [1]. The results of this study indicate that higher levels of perceived age discrimination are positively associated with higher levels of age-related diversity. According to [17], [48]–[50] companies do not benefit from the skill of older workers, and this is due to misconceptions such as that they are more expensive, suffer from health problems, and less able to adapt to development and technology. [18], [51]–[53] Younger employees are in the learning phase of their careers and are keen to embrace the latest concepts and ideas [54]. Older employees, who have more life experience, are also more mature and have strong managerial qualities. The study added that Western countries are working to bring senior and junior employees together to create a strong, integrated, and cohesive work culture [21], [23], [52], [55].

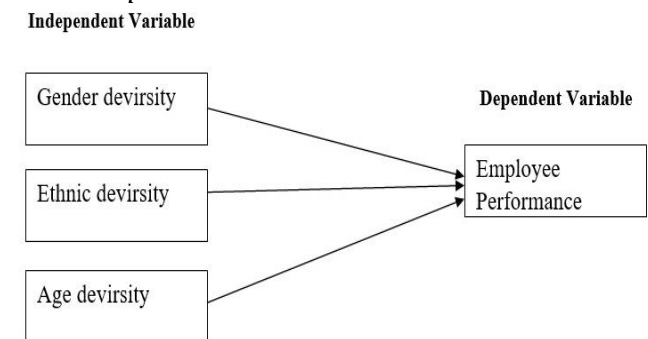
**2.2 Gender diversity and employee performances**

Rai, 2012. In order to understand whether the legislative representation of women has an impact on the boards of a organizations across certain countries, such as European countries [56]. Ray conducted a study to determine the status of women [25]–[27], [57]. This study assessed the different strategies, laws, and standards applied by different countries to deal with women-specific challenges that affect women. Eugene and several other researchers [12]–[15]. They found that gender diversity led to an important breakthrough in the aviation industry, as the participation of women led to an increase in productivity in very good proportions. According to [8]–[11], all over the world, the majority of organizational and corporate cultures also continue to hold on to the idea that men should rule the entire world. Most companies prefer male employees over female employees because they believe that men are able to perform tasks better [3]–[6].

**2.3 Employee diversity and performances in UAE.**

[16]–[18]. The UAE is considered one of the most and best countries that contains job opportunities with good salaries and offers that attract everyone from all over the world. Now the UAE is under great pressure to better absorb and manage employees from different cultures. [19], [21], [22]. The UAE gives this period the greatest importance to managing skills to increase diversity in work environments, so managers must develop strategies in order to improve communication between employees [23]–[25].

**2.4 Conceptual Framework**



Variables components are presented in the following table:

Variable	Type	Category
Employee performance	Dependent Variable	Demographic variable
Gender diversity	Independent Variable	Demographic variable
Age diversity	Independent Variable	Demographic variable
Ethnic diversity	Independent Variable	Demographic variable

Hereby, we present the hypothesis of the study as the following:

HO: There is no impact of Gender diversity on employee performance. HA: There is an impact of Gender diversity on employee performance.

HO: There is no impact of Ethnic diversity on employee performance. HA: There is an impact of Ethnic diversity on employee performance.

HO: There is no impact of Age diversity on employee performance. HA: There is an impact of Age diversity on employee performance.

### 3. METHODOLOGY

#### 3.1. Case Demonstration

We are also aware that the study relies on data selected randomly from three prominent stores in the United Arab Emirates (Abu Dhabi Cooperative Society, Sharjah Cooperative Society, and Ajman Markets Cooperative Society). The study sample consists of 100 people, and the sampling technique utilized in this instance is a probability sample. All of the employees' gender, ages, and ethnicities were taken into account when choosing the sample, among other variables. Therefore, information must be collected from workers who belong to these categories. In order to understand the difficulties and issues that employees experience and to obtain customer feedback on employees' performance, it is also required to survey both employees and customers. Then the hypothesis will be tested for the proposed methodology. The data for this study will be gathered via the questionnaire approach. Respondents only need to answer the questions on the questionnaire; no further information is needed from them. The respondents' further information must remain private. The data gathered for this study is only utilized for academic purposes; no organizations are linked to it. Confidentiality of any information pertaining to data collecting must be maintained by dealing handled it with diligence and care. Respondents can anonymously submit information using Google Forms.

There are two techniques for collecting data, and each technique has completely different methods from the others: Qualitative research methods are expressed in words or documents that clarify the opinions and thinking of the respondents within the community. It can be done through interviews, observation, focus groups, etc. Quantitative research methods depend on numbers and on numerical evidence that we can measure and through which we can study and analyze the relationships between variables. We can do it through surveys, experiments, and database reports. In this research, the quantitative research method was used and applied through questionnaire, data analysis, and relationships between variables. There are several ways to distribute surveys, including online: over the internet, paper based: physical questionnaires, in-

person interviews, or telephone techniques: via phone. the online survey method was selected for this study in order to reach larger audience, operate with greater transparency, and facilitate collaboration. link to google form was sent to members so they could easily access and finish the online survey. the study's frequency was once, and capturing data at specific time point.

Measurement Scale is a tool used by researchers to count and categories variables while assigning numerical significance to sightings is called a measurement scale. The kind of variable being examined along with the amount of clarity needed for the study will affect what measuring scale is selected.

To conduct the research, questionnaire approach was used using Google Forms, which makes it easier for users to access it and it is the best way to collect data. A four-point Likert scale was used to design the questionnaire. The questionnaire consists of 3 questions, three of which discuss the demographic part. The designed questionnaire provides all the required data that helped us effectively conduct the research.

The two main categories of sampling approaches are probability and non-probability strategies. While non-probability sampling does not guarantee equal representation, probability sampling ensures that each member of the population has an equal and fair chance of being identified. Among the techniques used in probability sampling are Picking Randomly, systematic sampling, stratified sampling, and cluster sampling all involve selecting entire groups at random. Random sampling, or probability sampling, was applied for our research. This involved selecting 50 people at random from the population in order to reduce prejudice and get variety of opinions.

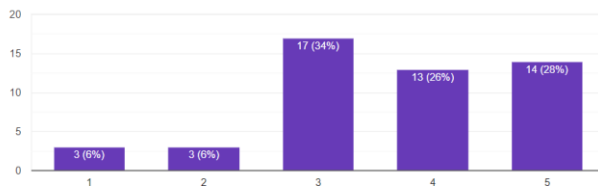
Variable	Type Nominal/ ordinal	Measurement Scale
Employee Performance	Ordinal	Likert Scale
Gender diversity	Ordinal	Likert Scale
Ethnic diversity	Ordinal	Likert Scale
Age diversity	Ordinal	Likert Scale

### 4. DATA ANALYSIS AND DISCUSSION

Strategies for data analysis encompass variety of

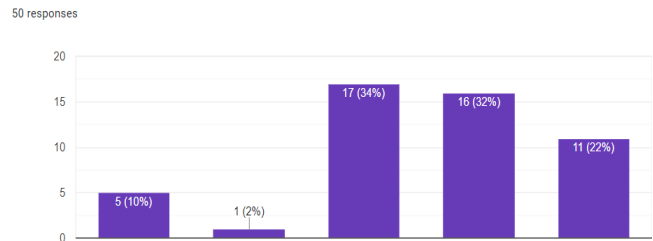
approaches, such as reporting, descriptive, exploratory, and predictive procedures. Reporting analysis: Usually used for direct data presentations, it consists of summarizing and introducing information without doing any more research. The main goal of descriptive analysis is to summarize and illustrate the key components of the data while providing a basic understanding of its properties. Plans to look to identify investigate or distinguish in the data that will guide additional analysis are known as exploratory analyses. Predictive analysis is the process of using data patterns to forecast future outcomes based on past trends in the data. The descriptive analysis approach was used for our study n because to its ability to condensable summarize data features, providing an understanding of the dataset without the need for intricate modelling. The method of descriptive analysis of data summaries using metrics like mean, standard deviation, and skewness are part of descriptive analysis. These quantifiable tools provide thorough understanding of the dataset's distributional properties, variability, and key tendencies. We will specifically use skewness to comprehend the asymmetry—or lack thereof—in the data distribution, mean as measure of central tendency, and standard deviation as a measure of data dispersion in our analysis. utilized.

Do you agree that gender diversity affects employee performance in Sharjah coop ? Copy  
50 responses



The largest percentage is the (Natural) option, meaning that 34% of the respondents are not biased toward any of the other options (3). The total percentage of respondents who do not agree is 12% (1,2), and the percentage of respondents who agree is 54% (4,5).

Does the ethnic diversity impact on employee performance in Sharjah coop ? Copy  
Do you think that age diversity affects employee performance in Sharjah coop ? Copy

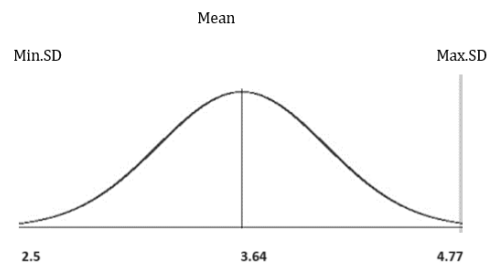


The largest percentage is the (Natural) option, meaning that 38% of the respondents are not biased toward any of the other options (3). The total percentage of respondents who do not agree is 18% (1,2), and the percentage of respondents who agree is 44% (4,5).

The largest percentage is the (Natural) option, meaning that 34% of the respondents are not biased toward any of the other options (3). The total percentage of respondents who do not agree is 12% (1,2), and the percentage of respondents who agree is 54% (4,5).

RQ1

Do you agree that gender diversity affects employee performance in Sharjah coop ?	
Mean	3.64
Standard Deviation	1.138563363
Skewness	-0.533865809



In the first to research question, we see that q the average q of the people who responded q to the questions is q approximately 3.64. the q skewness in the left side (Left skewness) which means more q o negative responses. In terms of standard o deviation, the average maximum response received is 4.77 and the minimum is 2.5. A standard deviation of 1.13 is considered high standard deviation because it's close to the mean= 3.64. A high standard deviation indicates more variability or spread in the data.

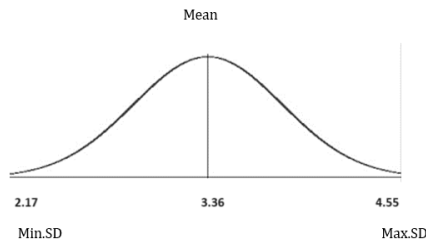
H0 is accepted.

$$\text{Max} = \text{Mean} + \text{Standard Deviation } 3.64 + 1.13 = 4.77$$

$$\text{Min} = \text{Mean} - \text{Standard deviation } 3.64 - 1.13 = 2.5$$

RQ2

Does the ethnic diversity impact on employee performance in Sharjah coop ?	
Mean	3.36
Standard Deviation	1.191123633
Skewness	-0.37001741



The mean of 3.36 demonstrates high perceived impact of ethnic diversity on employee performance in Sharjah coop. the skewness will be to the left side (left skewness) which means negative responses. In terms of standard deviation, the average maximum response received is 4.55 and the minimum is 2.17. standard deviation of 1.19 is considered high standard deviation because it's close to the mean= 3.36. A high standard deviation indicates more variability or spread in the data.

H0 is accepted.

$$\text{Max} = \text{Mean} + \text{Standard Deviation}$$

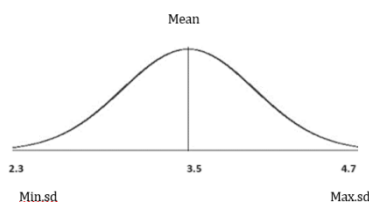
$$3.36 + 1.19 = 4.55$$

$$\text{Min} = \text{Mean} - \text{Standard Deviation}$$

$$3.64 - 1.19 = 2.17$$

RQ3

Do you think that age diversity affects employee performance in Sharjah coop ?	
Mean	3.54
Standard Deviation	1.164263803
Skewness	-0.70683714



In the first research question, We see that the average of the people who responded to the questions is approximately 3.54. The median more than the mode the mean less than the median, so

the skewness will be to the left (Left skewness) which means more negative responses. In terms of standard deviation, the average maximum response received 4.77 and the minimum is 2.3. A standard deviation of 1.16 is considered high standard deviation because it's close to the mean= 3.54. A high standard deviation indicate more variability or spread in the data.

H0 is accepted

$$\text{Max} = \text{Mean} + \text{Standard Deviation } 3.54 + 1.16 = 4.77$$

$$\text{Min} = \text{Mean} - \text{Standards Deviation } 3.54 - 1.16 = 2.3$$

## 5. RECOMMENDATIONS

The recommendations for enhancing gender diversity and improving work performance at Sharjah Coop involve creating an inclusive environment that values and supports employees of all genders. These suggestions include implementing inclusive leadership and policies, conducting diversity training, establishing mentorship programs, offering flexible work arrangements, conducting regular assessments, ensuring equal pay and recognition, and promoting diverse leadership representation. Implementing these strategies can help foster an inclusive culture, enhance gender diversity, and potentially improve overall work performance within Sharjah Coop. While this study didn't find an immediate effect on employee performance, maintaining gender diversity measures remain imperative. Enhancing ethnic diversity's impact on work performance in Sharjah Coop involves implementing strategies to create an inclusive and supportive environment. This includes comprehensive diversity p training, inclusive policies, and leadership commitment to endorse diversity initiatives. Providing fair opportunities for career advancement, celebrating cultural diversity, and fostering cross-cultural interactions among employees are vital. Engaging with local ethnic communities and establishing feedback mechanisms for employees further strengthens the organization's commitment to diversity and inclusion, ultimately improving work performance at Sharjah Coop. While this study didn't find an immediate effect on employee performance, maintaining ethnic diversity's measures remain imperative.

Despite the non-acceptance of the hypothesis with

respect with the Age diversity within Sharjah Coop holds significant potential to enhance work performance. Embracing a diverse age range among employees offers opportunities for knowledge sharing, innovation, and enhanced problem-solving. To leverage these advantages effectively, it's crucial to foster an inclusive workplace culture that values the unique perspectives and experiences of employees across different age groups. Implementing flexible work arrangements, promoting intergenerational collaboration, offering tailored training programs, and encouraging mutual respect are key strategies to harness the strengths of age diversity. By integrating these approaches, Sharjah Coop can create an environment that maximizes the collective skills and abilities of its multi-generational workforce, leading to improved organizational performance.

## 6. CONCLUSION

Because of the sizeable populations of many different countries, the study demonstrates that diverse kinds and performances in the Sharjah Cooperative have a strong correlation. Nonetheless, the UAE is facing an increasing number of diversity-related issues. Regulations and efficient organizational management can help overcome this. It is strongly recommended for companies to train and educate their employees in order to decrease diversity. Organizations must be uniform and use the same language and process in order to reduce diversity-related challenges. Finally, in order to promote teamwork among its diverse workforce, the corporation needs to organize events and training.

## REFERENCES

- [1] S. Khadragy *et al.*, "Predicting Diabetes in United Arab Emirates Healthcare: Artificial Intelligence and Data Mining Case Study," *South East Eur. J. Public Heal.*, vol. 5, 2022, doi: <https://doi.org/10.56801/seejph.vi.406>.
- [2] F. Bu, H. Wu, H. A. Mahmoud, H. M. Alzoubi, N. K. Ramazanovna, and Y. Gao, "Do financial inclusion, natural resources and urbanization affect the sustainable environment in emerging economies," *Resour. Policy*, vol. 87, p. 104292, 2023, doi: [10.1016/j.resourpol.2023.104292](https://doi.org/10.1016/j.resourpol.2023.104292).
- [3] M. Salameh *et al.*, "The Impact of Project Management Office's Role on Knowledge Management: A Systematic Review Study," *Comput. Integr. Manuf. Syst.*, vol. 28, no. 12, pp. 846–863, 2022, doi: [10.24297/j.cims.2022.12.59](https://doi.org/10.24297/j.cims.2022.12.59).
- [4] F. Shwedeh *et al.*, "SMEs' Innovativeness and Technology Adoption as Downsizing Strategies during COVID-19: The Moderating Role of Financial Sustainability in the Tourism Industry Using Structural Equation Modelling," *Sustainability*, vol. 14, no. 23, p. 16044, 2022, doi: <https://doi.org/10.3390/su142316044>.
- [5] S. Salloum *et al.*, "Understanding and Forecasting Chatbot Adoption: An SEM-ANN Methodology," *Migr. Lett.*, vol. 20, no. S11, pp. 652–668, 2023, doi: <https://doi.org/10.59670/ml.v20iS11.5717>.
- [6] F. Shwedeh, "THE IMPACT OF SMART CITY POLICY TIMELINESS AND TECHNOLOGY READINESS ON SMART CITY PERFORMANCE IN DUBAI: THE MODERATING EFFECT OF FINANCIAL AVAILABILITY," 2021.
- [7] C. Leng *et al.*, "An empirical assessment of the effect of natural resources and financial technologies on sustainable development in resource abundant developing countries: Evidence using MMQR estimation," *Resour. Policy*, vol. 89, p. 104555, 2024, doi: [10.1016/j.resourpol.2023.104555](https://doi.org/10.1016/j.resourpol.2023.104555).
- [8] R. Ravikumar *et al.*, "The Impact of Big Data Quality Analytics on Knowledge Management in Healthcare Institutions: Lessons Learned from Big Data's Application within The Healthcare Sector," *South East Eur. J. Public Heal.*, vol. 5, 2023, doi: <https://doi.org/10.56801/seejph.vi.309>.
- [9] F. Shwedeh, A. Aburayya, and M. Mansour, "The Impact of Organizational Digital Transformation on Employee Performance: A Study in the UAE," *Migr. Lett.*, vol. 20, no. S10, pp. 1260–1274, 2023, doi: <https://doi.org/10.59670/ml.v20iS10.5710>.
- [10] B. M. Dahu *et al.*, "The Impact of COVID-19 Lockdowns on Air Quality: A Systematic Review Study," *South East Eur. J. Public Heal.*, vol. 5, 2022, doi: <https://doi.org/10.11576/seejph-5929>.
- [11] M. Alkashami *et al.*, "AI different approaches and ANFIS data mining: A novel approach to predicting early employment readiness in middle eastern nations," *Int. J. Data Netw. Sci.*, vol. 7, no. 3, pp. 1267–1282, 2023, doi: [10.52677/ijdns.2023.4.011](https://doi.org/10.52677/ijdns.2023.4.011).
- [12] R. Ravikumar *et al.*, "Impact of knowledge sharing on knowledge Acquisition among Higher Education Employees," *Comput. Integr. Manuf. Syst.*, vol. 28, no. 12, pp. 827–845, 2022, doi: [10.24297/j.cims.2022.12.58](https://doi.org/10.24297/j.cims.2022.12.58).
- [13] F. Shwedeh, N. Hami, S. Z. Abu Bakar, F. M. Yamin, and A. Anuar, "The Relationship between Technology Readiness and Smart City Performance in Dubai," *J. Adv. Res. Appl. Sci. Eng. Technol.*, vol. 29, no. 1, pp. 1–12, 2022, doi: <https://doi.org/10.37934/araset.29.1.112>.
- [14] F. Shwedeh, S. Malaka, and B. Rwashdeh, "The Moderation Effect of Artificial Intelligent Hackers on the Relationship between Cyber Security Conducts and the Sustainability of Software Protection: A Comprehensive Review," *Migr. Lett.*, vol. 20, no. S9, pp. 1066–1072, 2023, doi: [10.59670/ml.v20iS9.4947](https://doi.org/10.59670/ml.v20iS9.4947).
- [15] S. A. Alimour *et al.*, "The quality traits of artificial

- intelligence operations in predicting mental healthcare professionals' perceptions: A case study in the psychotherapy division," *J. Auton. Intell.*, vol. 7, no. 4, 2024, doi: 10.32629/jai.v7i4.1438.
- [16] F. Shwede, N. Hami, and S. Z. Abu Baker, "Effect of leadership style on policy timeliness and performance of smart city in Dubai: a review," in *Proceedings of the International Conference on Industrial Engineering and Operations Management Dubai, UAE, March 10-12, 2020*, 2020, pp. 917-922.
- [17] A. Aburayya *et al.*, "SEM-machine learning-based model for perusing the adoption of metaverse in higher education in UAE," *Int. J. Data Netw. Sci.*, vol. 7, no. 2, pp. 667-676, 2023, doi: 10.5267/j.ijdns.2023.3.005.
- [18] F. Shwede, T. Aldabbagh, A. Aburayya, and H. Uppilappatta, "The Impact of Harnessing Total Quality Management Studies on the Performance of Smart Applications: A Study in Public and Private Sectors in the UAE," *Migr. Lett.*, vol. 20, no. S11, pp. 934-959, 2023, doi: <https://doi.org/10.59670/ml.v20iS11.5892>.
- [19] F. Shwede, "Harnessing digital issue in adopting metaverse technology in higher education institutions: Evidence from the United Arab Emirates," *Int. J. Data Netw. Sci.*, vol. 8, no. 1, pp. 489-504, 2024, doi: 10.5267/j.ijdns.2023.9.007.
- [20] Q. Hassan *et al.*, "The renewable energy role in the global energy Transformations," *Renew. Energy Focus*, vol. 48, p. 100545, 2024, doi: <https://doi.org/10.1016/j.ref.2024.100545>.
- [21] S. Khadragy *et al.*, "Predicting Diabetes in United Arab Emirates Healthcare: Artificial Intelligence and Data Mining Case Study," *South East. Eur. J. Public Heal.*, vol. 5, 2022, doi: <https://doi.org/10.56801/seejph.vi.406>.
- [22] N. Yas, M. N. I. Elyat, M. Saeed, F. Shwede, and S. Lootah, "The Impact of Intellectual Property Rights and the Work Environment on Information Security in the United Arab Emirates," *Kurd. Stud.*, vol. 12, no. 1, pp. 3931-3948, 2024, doi: 10.58262/ks.v12i1.282.
- [23] S. Abdallah *et al.*, "A COVID19 Quality Prediction Model based on IBM Watson Machine Learning and Artificial Intelligence Experiment," *Comput. Integr. Manuf. Syst.*, vol. 28, no. 11, pp. 499-518, 2022, doi: 10.24297/j.cims.2022.11.037.
- [24] F. Shwede, N. Hami, and S. Z. Abu Bakar, "Dubai smart city and residence happiness: A conceptual study," *Ann. Rom. Soc. Cell Biol.*, vol. 25, no. 1, pp. 7214-7222, 2021.
- [25] S. Salloum *et al.*, "Sustainability Model for the Continuous Intention to Use Metaverse Technology in Higher Education: A Case Study from Oman," *Sustainability*, vol. 15, no. 6, p. 5257, 2023, doi: 10.3390/su15065257.
- [26] F. Shwede *et al.*, "Entrepreneurial innovation among international students in the UAE: Differential role of entrepreneurial education using SEM analysis," *Int. J. Innov. Res. Sci. Stud.*, vol. 6, no. 2, pp. 266-280, 2023, doi: <https://doi.org/10.53894/ijriss.v6i2.1328>.
- [27] A. El Nokiti, K. Shaalan1, S. Salloum2, A. Aburayya, F. Shwede, and B. Shameem3, "Is Blockchain the answer? A qualitative Study on how Blockchain Technology Could be used in the Education Sector to Improve the Quality of Education Services and the Overall Student Experience," *Comput. Integr. Manuf. Syst.*, vol. 28, no. 11, pp. 543-556, 2022, doi: 10.24297/j.cims.2022.11.039.
- [28] A. A. A. M. A. and et al. Al Ayadeh I, "Evolving a hybrid appointment system for patient scheduling in primary healthcare centres in Dubai: Perceptions of patients and healthcare provider.," *Int. J. Emerg. Technol.*, vol. 11, no. 2, pp. 251-260, 2020.
- [29] A. A. Alsharhan A, Salloum SA, "Technology acceptance drivers for AR smart glasses in the middle east: A quantitative study. International Journal of Data and Network Science.: 193-208. doi:," *10.5267/j.ijdns.2021.9.008*, vol. 6, no. 1, 2022, doi: 10.5267/j.ijdns.2021.9.008.
- [30] S. S. Almarzouqi A, Aburayya A, "Determinants predicting the electronic medical record adoption in healthcare: A SEM-Artificial Neural Network approach. Haldorai A, ed. PLOS ONE," vol. 17, no. 8, 2022, doi: 10.1371/journal.pone.0272735y.
- [31] A. A. A. D. and T. M. "Aburayya A, Alawadhi D, Taryam M. A conceptual framework for implementing TQM in the primary healthcare centers and examining its impact on patient satisfaction. Research.," *Int. J. Adv. Res.*, vol. 7, no. 3, pp. 1047-1065, 2019.
- [32] A. Aburayya, D. Alawadhi, and M. Taryam, "A conceptual framework for implementing TQM in the primary healthcare centers and examining its impact on patient satisfaction," *Int. J. Adv. Res.*, vol. 7, no. 3, pp. 1047-1065, 2019, doi: 10.21474/IJAR01/8735.
- [33] H. Yousuf, S. Salloum, A. Aburayya, M. Al-Emran, and K. Shaalan, "A systematic review of CRYPTDB: Implementation, challenges, and future opportunities," *J. Manag. Inf. Decis. Sci.*, vol. 24, no. Special Issue 1, pp. 1-16, 2021.
- [34] R. Abousamra *et al.*, "Predicting the Intention to Use Google Glass in the Educational Projects: A Hybrid SEM-ML Approach," *Acad. Strateg. Manag. J.*, vol. 21, no. S6, pp. 1-13, 2022.
- [35] S. R. AlSuwaidi, M. Alshurideh, B. Al Kurdi, and A. Aburayya, "The main catalysts for collaborate R&D projects in Dubai industrial sector.," in *The Internaonal Conference on Arificial Intelligence and Computer Vision*, 2021, pp. 795-806.
- [36] M. Taryam *et al.*, "(2021). The impact of the covid-19 pandemic on the mental health status of healthcare providers in the primary health care sector in Dubai.," *Linguist Antverp.*, vol. 21, no. 2, pp. 2995-3015, 2021.
- [37] R. S. Al-Marroof, K. Alhumaid, A. Q. Alhamad, A. Aburayya, and S. Salloum, "User acceptance of smart watch for medical purposes: an empirical study.," *Futur. Internet*, vol. 13, no. 5, p. 127, 2021, doi: <https://doi.org/10.3390/fi13050127>.
- [38] M. Alawadhi *et al.*, "Factors affec?ng medical students' acceptance of the metaverse system in medical training in the United Arab Emirates.," *South East. Eur. J. Public Heal.*, no. Special Volume No. 5, 2022, doi: 10.11576/seejph-5759.
- [39] E. MOUZAEEK, N. ALAALI, S. A. I. D. SALLOUM, and A. ABURAYYA, "An empirical investigation of the impact of service quality dimensions on guests satisfaction: A



- case study of Dubai Hotels," *J. Contemp. Issues Bus. Gov.*, vol. 27, no. 3, pp. 1186–1199, 2021, doi: 10.47750/cibg.2021.27.03.160.
- [40] S. Aljasmí *et al.*, "The Impact of Hospital Demographic Factors on Total Quality Management Implementation: A Case Study of UAE Hospitals," *South East. Eur. J. Public Heal.*, vol. Special Vo, pp. 1–13, 2022, doi: 10.11576/seejph-5758.
- [41] K. Alaboud *et al.*, "The Quality Application of Deep Learning in Clinical Outcome Predictions Using Electronic Health Record Data: A Systematic Review," *South East. Eur. J. Public Heal.*, vol. Volume XXI, pp. 09–23, 2023.
- [42] A. Almarzouqi, A. Aburayya, and S. A. Salloum, "Determinants predicting the electronic medical record adoption in healthcare: A SEM-Artificial Neural Network approach," *PLoS One*, vol. 17, no. 8, p. e0272735, 2022, doi: 10.1371/journal.pone.0272735.
- [43] A. Alsharhan, S. A. Salloum, and A. Aburayya, "Using e-learning factors to predict student performance in the practice of precision education," *Pt. 2 J. Leg. Ethical Regul. Isses*, vol. 24, no. Special Issue 6, p. 1, 2021.
- [44] S. A. Salloum *et al.*, "Novel machine learning based approach for analysing the adoption of metaverse in medical training: A UAE case study," *Informatics Med. Unlocked*, vol. 42, p. 101354, 2023, doi: 10.1016/j.imu.2023.101354.
- [45] A. Aburayya, A. Marzouqi, I. Iyadeh, A. Albqaeen, and S. Mubarak, "Evolving a Hybrid Appointment System for Patient scheduling in Primary Healthcare Centres in Dubai: Perceptions of Patients and Healthcare Providers," *Int. J. Emerg. Technol.*, vol. 11, no. 2, pp. 251–260, 2020, doi: [https://d1wqtxts1x7le7.cloudfront.net/63548291/Evolving\\_a\\_Hybrid\\_Appointment\\_System\\_for\\_Patient\\_Scheduling\\_in\\_Primary\\_Healthcare\\_Centres\\_in\\_Dubai\\_Perce20200606-109135-jr0twj-libre.pdf?1591473666=&response-content-disposition=inline%3B+filename%3DEvolving\\_a\\_Hybrid\\_Appointment\\_System\\_for.pdf&Expires=1706534986&Signature=fseyo0TYWnISW0FY7G-RRIPvulgk3Nhl4GQy1MX4ui1KaP0gqqbdiXNK3Sr8IR9-4VLiREFosotAVq6iUMrQJR~uTD4SmuHD0HTciDTy\]ckgxu9fKEGEtEom~kuTiXbsP5sdqvyKot6GYo4cc-zXYnV8ADfj~fMJH~r9QBmeUoET\]KajfuAa](https://d1wqtxts1x7le7.cloudfront.net/63548291/Evolving_a_Hybrid_Appointment_System_for_Patient_Scheduling_in_Primary_Healthcare_Centres_in_Dubai_Perce20200606-109135-jr0twj-libre.pdf?1591473666=&response-content-disposition=inline%3B+filename%3DEvolving_a_Hybrid_Appointment_System_for.pdf&Expires=1706534986&Signature=fseyo0TYWnISW0FY7G-RRIPvulgk3Nhl4GQy1MX4ui1KaP0gqqbdiXNK3Sr8IR9-4VLiREFosotAVq6iUMrQJR~uTD4SmuHD0HTciDTy]ckgxu9fKEGEtEom~kuTiXbsP5sdqvyKot6GYo4cc-zXYnV8ADfj~fMJH~r9QBmeUoET]KajfuAa).
- [46] I. Shahin, A. B. Nassif, A. Elnagar, S. Gamal, S. A. Salloum, and A. Aburayya, "NEUROFEEDBACK INTERVENTIONS FOR SPEECH AND LANGUAGE IMPAIRMENT: A SYSTEMATIC REVIEW," *J. Manag. Inf. Decis. Sci.*, vol. 24, no. Special Issue 1, pp. 1–30, 2021.
- [47] A. Alsharhan, S. Salloum, and A. Aburayya, "Technology acceptance drivers for AR smart glasses in the middle east: A quantitative study," *Int. J. Data Netw. Sci.*, vol. 6, no. 1, pp. 193–208, 2022, doi: 10.5267/j.ijdns.2021.9.008.
- [48] I. Al Eideh *et al.*, "Examination of the Effect of TQM Implementation on Innovation Performance: An Assessment Study In the UAE Healthcare Sector," *Acad. Strateg. Manag. J.*, vol. 21, no. Special Issue 4, pp. 1–17, 2022.
- [49] B. M. Dahu, S. Khan, A. A. Salman, Y. M. Andraws, A. Abo Daken, and A. Aburayya, "Epidemiological Analysis of Vaccination Strategies and Demographic Patterns In COVID-19 Cases in The Midwest Region of The United States," *Natl. J. Community Med.*, vol. 14, no. 1, pp. 62–71, 2024, doi: 10.55489/njcm.150120243461.
- [50] S. A. Salloum, N. M. N. AlAhbabí, M. Habes, A. Aburayya, and I. Akour, "Predicting the Intention to Use Social Media Sites: A Hybrid SEM-Machine Learning Approach," in *Advanced Machine Learning Technologies and Applications: Proceedings of AMLTA 2021*, Springer International Publishing, 2021, pp. 324–334.
- [51] R. S. Al-Marroof, K. Alhumaid, A. Q. Alhamad, A. Aburayya, and S. Salloum, "User acceptance of smart watch for medical purposes: an empirical study," *Futur. Internet*, vol. 13, no. 5, p. 127, 2021.
- [52] A. Almarzouqi, A. Aburayya, and S. A. Salloum, "Determinants of intention to use medical smartwatch-based dual-stage SEM-ANN analysis," *Informatics Med. Unlocked*, vol. 28, pp. 1–12, 2022, doi: 10.1016/j.imu.2022.100859.
- [53] A. Jasri, S. Aljasmí, and A. Aburayya, "Employing PLS-SEM Analysis to Examine the Mediation Role of Artificial Intelligence in Physician Experience. An Empirical Study of the Effect of the Medical Smartwatch on Physician Satisfaction," *South East. Eur. J. Public Heal.*, vol. Special Vo, 2022, doi: <https://doi.org/10.56801/seejph.vi.407>.
- [54] B. Li, S. Mousa, J. R. R. Reinoso, H. M. Alzoubi, A. Ali, and A. D. Hoang, "The role of technology innovation, customer retention and business continuity on firm performance after post-pandemic era in China's SMEs," *Econ. Anal. Policy*, vol. 78, pp. 1209–1220, 2023, doi: 10.1016/j.eap.2023.05.004.
- [55] M. A. Almaiah *et al.*, "Factors affecting the adoption of digital information technologies in higher education: An empirical study," *Electronics*, vol. 11, no. 21, p. 3572, 2022, doi: 10.3390/electronics11213572.
- [56] K. Liu *et al.*, "Exploring the Nexus between Fintech, natural resources, urbanization, and environment sustainability in China: A QARDL study," *Resour. Policy*, vol. 89, p. 104557, 2024, doi: 10.1016/j.resourpol.2023.104557.
- [57] M. Taryam *et al.*, "Factors Affecting the Uptake of COVID-19 Vaccine among Dubai Airport's Professionals," *South East. Eur. J. Public Heal.*, vol. 17, no. 2, pp. 1–14, 2022, doi: <https://doi.org/10.11576/seejph-5091>.