

FACTORS THAT INFLUENCE ORGANIZATION TO ENGAGE WITH  
AI-BASED TOOLS

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## LIST OF ABBREVIATIONS

SPSS	Statistical Package for Social Science
AU	AI usage
OC	Organizational Culture
FP	Financial Performance
DM	Decision making



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## PREFACE

My name is Amretjit Singh Khalae, I am a Year 3 Semester 3 Bachelor of International Business student. The topic of factors that influence organization to engage with AI-based tools is the choice for this research paper. This is due to the reason for interest in understanding the ways that the organization environment is changing with the introduction of AI tools has become of common use among the masses. As with time the world has changed through the introduction of technology since the Industrial Revolution. The introduction of new technology has always changed the environment of society and the ways we operate within that environment are of great interest the key to focus on the navigation of the cultural environment. Exploration of the research topic will be useful to know which aspect greatly impacts the organization and the learning of the organization's acceptance of the technology.

## ABSTRACT

The research will be looking into the factors that influence organization to engage with AI-based tools. The beginning of the research will establish the background of how the progress of technology has been brought forward to the use of AI within organizational. The introduction of the research problem and the significance of the research. The next part of the research will establish of the dependent variable and independent variables are AI usage being dependent variable and the independent variable are organizational culture, financial performance and decision making. The research will be setting the hypothesis that will be tested. The research will be using a questionnaire using google form with the aim of gaining 120 respondents to receive a sufficient data to make conclusions and analysis. The analysis the research will be using inferential analysis and descriptive analysis to make a proper judgment of the findings. The research will use the data gained to conclude with a significant relationship between the independent variable and the dependent variable. The research will be assessing the impact of the research findings on the data and the discussion of the positive or negative relationship between the variables. The research will give the limitations that are present to gain a deeper understanding of the topic. There will even be a recommendation for future research to consider to enhance the capabilities of the finding of the data and analysis.

## **Chapter 1**

### **1.1 Research Background**

Businesses have been going through major challenges over the past few years as the COVID-19 pandemic has made businesses enter the mindset of progression of their business model to match the current complexity of the business world today. Thus, businesses have been pushed to further adopt technology readiness to be able to keep up with the competitive market. In today's modern age, there have been various advancements in technology that have rippling effects through different industries. How current technology has made many businesses switch to digitalized models to gain an advantage in reaching their consumers and rivaling their competitors in the digital space? There is now a current trend of technology that has been popularized. That is the use of AI tools. As the times have shown since the start of the Industrial Revolution the push toward an integration of technology into society as the ways of our daily activity have been digitalizing is able to be seen as currency seen as online transaction payment have been quite prominent and how computerization of documentation and information. These are the leaps that society has experienced with technology thus, the prospect of AI is able to be a functioning part of our society.

First, we need to understand what AI in this case with the definition given in Kelly, S., Kaye, S. A., & Oviedo-Trespalacios, O. 2022 is a man-made entity that is assigned to carry out tasks and has the capabilities to overperform within these tasks. Now moving forward, we can discuss the subject of AI-based technology. Artificial Intelligence has been able to be utilized in our modern society in different aspects to gather information and be able to create algorithms to sort data based on an individual's behavior or group's behavior. There have been talks that AI might not be capable of solving complex problems or can be easily integrated into the organization. But now we do live in an age where AI-based technology is being seen as a viable option for business. ChatGPT is an AI that has been trending within today's climate as the tool is quite versatile in its use to help in any aspect of our daily life by being to help and can certainly be applied to business. There are even further applications of AI tools such as TensorFlow's able to have the ability to teach students with its machine learning system. Chatbot is an AI tool that can understand questions and give an automated response. These are a few of the AI tools that are present in our society and there are even AI tools that can help with problem-solving, and the tools can even be used for creative uses.

AI as a tool is the ways AI able to can be used in day-to-day activity to complete and assist within the organization. The research will see the position of AI tools in the organizational culture looking into the shift in dynamics and how the tool affects the employee's perspective on the work environment. The AI tools will even be seen through their uses in the decision-making process of an organization leading to the ways that the AI can anticipate algorithm-based decisions to have the organization be able to trust the AI decision and how the AI can be implemented to the thought process of the organization decision. The research will even check if AI can impact financial performance and can improve the organization's financial positioning. The research seeks an understanding of the organization's ability to accept the changes these AI tools are able to affect within these aspects and there perception of if the AI tool has a position in the organization is seen as a positive progress made to the standard of organization or a negative to the how the organization feel a major change to there cultur

## **1.2 Research Problem**

The Artificial Intelligence (AI) concept was established even before the field was put into practice within the time frame of the 1950s with the Alan Turing presentation Turing test to place the parameter to judge machine learning intelligence leading to the term AI mentioned in the Dartmouth Conference in 1956 based on Khan, F. H., Pasha, M. A., & Masud, S. 202. Through the years AI progress has been on a steady incline as AI developer has been able to improve on the machine and deep learning with the uses of dataset sees that the AI is capable of answering the demands of people and by providing this progress have been the foundation of how AI has been able to be integrated in society.

AI acceptance is the topic at hand that has been brought forward as an organization's technology acceptance model in short TAM which examines the organization the trust and knowledge of the technology at hand based on Kelly, S., Kaye, S. A., & Oviedo-Trespalcios, O. 2022. Kelly, S., Kaye, S. A., & Oviedo-Trespalcios, O. 2022 conclude that intention usefulness, and performance are how the organization would engage with AI tools as they want to have benefits that can be achieved through their usage. As such the organization's movement to the acceptance of AI hinges on these factors and the research aims to highlight these points of engagement. AI can be seen to have businesses grow in covering their weaknesses. Their efficiency and integration have been the subject of debate as the uses of AI tools may be seen as still being suboptimal to current business standards.

As such the organization will certainly need to reconsider these concerns as the use of AI tools will certainly be a point that is needed for the progress of the organization as there can be a foreseeable future of AI tools being a common practice among society to complete or overall improve the work environment. This leads to the idea that the different parts of an organization can thrive with AI tools and give them a leg up in the world by modernizing their space to accommodate AI tools instead of a rigid mindset that could be detrimental to an organization. The progress that AI tools can provide is debatable the AI tool cannot provide a proper deduction compared to the members of the organization is an argument arises to the discussion of AI decision-making and the mentality that there may be a data error of the AI tool that could not be accounted. There is even the argument that AI use in financial input may be seen a complex and can face errors through failure of data input.

Based on the Venkatesh, V. 2022 has brought up this issue and challenges that may be faced in the use of AI tools as the learning curve for AI tools is not only limited to employees' managers and investors to be able to properly adopt the technology. The main challenges relate to human biases, incorrect data, or even the fear of change in the working landscape. the situation left open to where the AI tool is a factor that can be essentially to progress and be the key aspect is an organization's sustainability. The research will be focused on the factors that bring organizational culture, decision-making, and financial performance to the usage of AI tools. This research is limited in scope and will need further research to prove the theories and data that are presented.

### **1.3 Research Objectives and Research Question**

The main objective of conducting this research is to understand factors that influence organizations to engage with AI-based tools. Therefore, the investigation will be carried out in this study report to observe how AI tools affect the organization's performance.

- a) To examine the relationship between AI tools' influence on organizational culture and AI.
- b) To examine the relationship between AI tools' influence on financial performance and AI.
- c) To examine the relationship between AI tools' influence on decision-making and AI.

The research in question is to analyze and understand the Factors that influence organizations to engage with AI-based tools. As a measure of the business performance to determine the significant effects of the AI tools. The research sees how the use of the AI tool can help shape an organization's culture around data that is given to the tool. The exploration of how an AI can lead to financial calculation and determine the route to optimize the organization's resources to achieve a desired financial position. Lastly, AI computing has been capable of giving decisive answers that can affect decision-making within an organization.

- a) Does organizational culture affect the use of AI tools
- b) Does financial performance affect the use of AI tools
- c) Does decision-making affect the use of AI tools

#### **1.4 Research Significant**

The topic that this research analysis is the factors that organizations engage with AI tools based on the engagement with organizational culture and the ways that AI reinvents the workplace environments with the way employees carry themselves. The AI tool's ability to help with the financial performance of an organization and be able to have ease of record of the date and reaching a conclusion on the financial position of the organization and bring the company's attention to keep their financial balance as well as strategies to advance through difficult economic times. Furthermore, AI can be used to make complex decisions making that the use of algorithms and expensive data sets that can be used to make inferences and be able to conclude. Thus, the research is to see the way businesses and organizations are moved towards the usage of AI tools to be integrated.



## **Chapter 2**

### **2.1 Underlying theories**

#### **Technology Acceptance Model**

As mentioned by Kelly, S., Kaye, S. A., & Oviedo-Trespalacios, O. 2022. The technology acceptance model is seen as the way society is able to accept technology integration. The statement of perceived usefulness is the key to the research is seeking to understand. The application of the technology is the way that can raise the standard is how the organization can accept the use of the tool. The perceived usefulness is through the experience that can be demonstrated in the way that the acceptance level is increased. Thus, there can be a stipulation from the TAM is the aspect of perceived usefulness is imprinted to the continuous use of the technology with moderation in the way that the technology will be commonly used within society. The secondary aspect of the TAM is the ease of use of the behaviour of the society to accept is seen within the intention of the technology and whether is there a motivation of the use of the technology to be accepted. The ways that the theory is applied to the research is the AI tools usage is the technology that is seen to be accepted for the organization.

The usage of AI tools within an organization is a growing trend that has certainly been on the horizon of the 20th century as computers and the introduction or integration of the internet into social norms of society are more than common now. Thus, the concept of AI tools in organizations is not that far-fetched for businesses to begin their exploration into the usefulness and impact of the tool on the standard of the organization over the years. Based on the Lee, J., Suh, T., Roy, D., & Baucus, M. 2019 showed a study that AI usage can be a triggering point for business model innovation and that indeed the business will be able to utilize the newfound tools to their benefit with the assistant of leaders that are willing to learn the technology and be able to gain expertise in there employees to use the tools as well as restructure their current systems. The basis is that AI tools will be a step forward in the world restructuring to gain a boost in productivity if the AI tools are integrated properly into the organization.

## **2.2 Reviewing variables.**

### **2.2.1 AI usage**

AI usage or what AI is defined for the research needs to look through the distinguishing points of what makes an AI based on the verbiage of Wang, P. 2019 where AI is seen as the term that focuses on the imitation of human thinking that the AI will need to be capable to percept problems and five solutions through a dataset that the AI is given and the knowledge it has gained to stimulate to the human perception. The functionality of the tools is to be a consistent source of information to be able to perceive and solve problems with the information. Formulation of the information is known to be an algorithm that is learning and adapting to continue stimuli of data able to structure patterns for the organization to rely on. This brings us to the principal use of AI within the organization where the topic of the rationale of having the AI decision on a situation. The aim of AI usage should be the elimination of human innovation or replacement of the human position within an organization but to work alongside them to cater to effective problem solving and accurate data collection for them to create a sufficient organization environment that is the usage of AI.

AI usage for that matter is the usage can be seen in the ways that the uses are to be made for work as the analysis of data that is for the practical use of operation with organization. Ayling, J., & Chapman, A. 2022. have concluded that there is an ethic of AI usage within an operation. AI usage is dependent on the effects of the technology information privacy with data protection is the base to see the usage be implemented in an operational framework. Thus, to be certain there needs to be an assessment of data protection as the aspect of an organization's need for AI usage to be properly seen to the adaption and application.

As the AI usage is the main aspect of the research to have the variable to impact the following variable to organization culture, financial performance, and decision-making. To see the organization's perception as the engage with the AI tools is affected by the variable and the ways the members organization are able to see the implementation of the tools are able to be taken into account and is there a possibility for the factors to have a positive or negative relation with the variable.

### **2.2.2 Organizational culture**

Organizational culture has certainly been evolving through the years and the workplace environment has become more open and diverse in today's world. The establishment of an organizational culture is that the employees, managers, and investors chain and structure of command that the company has practiced. The introduction of AI tools will have shifted the dynamic of the organization as there are a multitude of facets to be considered. Organizational culture means the construction of the organization's perspective, identity, and imagery for them to perform their activities based on the organization's history of performance based on Jo Hatch, M., & Schultz, M. 1997. These are the aspects of the culture that are integral to understanding the acceptance of the AI tools. The identity and imagery of the organization is key to the acceptance as the organization may see the use of AI tool is seen as a cheap imitation of human innovation and will there be a perception that using AI is considered a threat to the balance in the cultural work environment.

Starting off with the environment of the organization with AI tools integration. The need to create a pro AI tools environment should be seen through the communication of employees and the manager's readiness to adapt the technology. Isensee, C., Griese, K. M., & Teuteberg, F. 2021, December have brought to the discussion the cultural sustainability of AI tools as the need to have a positive influence on AI development is the way that the organization can seamlessly transition to an innovative and sustainable environment. Leading to a belief that the use of AI tools to have a sustainable corporate culture and with systemic guidance will bring benefits forward of the tools. As the studies bring the intention of having a sustained use of AI and does not bring an over reliance of the AI tool will maintain a positive corporate culture or in the research case the ability to have a positive impact on the organizational culture environment to work with AI tools

Next is the need to bring employees' perspectives into the equation of AI tools for the organization's culture. Isensee, C., Griese, K. M., & Teuteberg, F. 2021, December has stated that the training of employees to use the tools will be key for the smooth transition as well as the appearance of special employees that have common practices with the tool to Aid the employees that are out of touch with the current innovative climate. Lingmont, D. N., & Alexiou, A. 2020 raised a concern that seems to plague employees is that the AI tools are replacements for their positions. This is a sentiment that is widely shared but is an attitude that is certainly fearmongering them to be against innovation. AI tools are not to be there to replace

human employees but as the name suggests are a tool for them for their ease of use. The clashing of the ideology that there are incentives to replace employees with AI tools is the best interest of the organization as there will be an chance to lower the position withing the organization as the tools will fill those roles as a posed to have multiple position for a certain function within the organization.

Based on Zhen, Z., Yousaf, Z., Radulescu, M., & Yasir, M. 2021 the organization will be able to utilize the tools to formulate a strategy based on the data they have implemented meaning the tool will be able to give a strategic option that the company may consider and be able to evaluate on their bases for the best course of action. Hashem, F., & Alqatamin, R. 2021 to be sure to have aligned the focus for the company that the role the tool will take place within an organization to an overall goal for them to achieve the best result from AI tools to enhance the cultural acceptance of the AI tools is by the suggested method of learning and teaching current member is effective to the relation of organization cultural and the use of AI tools within the organization.

### **2.2.3 Financial performance**

Financial performance is the organization's indication of the status and position of the given time period. Financial performance is the measurement that is the organization's ability to know when the need to pull back from a venture or be able to push forward in the running stream of success. This can be seen that is essential that the financial aspect of the organization be handled with the utmost importance. As such the uses of AI tools can be used to have a better financial position for the organization for future endeavours. Based on Hindasah, L., & Nuryakin, N. 2020 is shown financial performance can be seen as closely related to the capabilities of the organization will be able to have the learning and position themselves with that knowledge of the implication of AI within the sector of financial standing of the organization will maintain an understanding that there is a relation to the usage of AI to affect the financial performance of the organization.

The Digitalisation of the financial aspect of an organization is enabled by the way of progress of AI in the use to create an automated service as stated by (Manser Payne, E. H., Dahl, A. J., & Peltier, J. 2021). The relative convenience of the banking service for the organization will be able to improve the value and proposition of the organization. The enhancement will even be able to have a positive effect on the organization's consumer base with AI will be able to provide the consumers with necessary monetary information from the

organization. As stated in Shiyyab, F. S., Alzoubi, A. B., Obidat, Q. M., & Alshurafat, H. 2023 AI can create a stable financial performance as the organization will be able to have the AI system to avoid systemic and regulation risks and will need to have a less demanding form the organization to be able to have better compliance as the organization can even be able to reduce on the repetitiveness task of the organization to increase the overall productivity.

Based on Hashem, F., & Alqatamin, R. 2021 financial performance efficiency can be improved in the way of the computerization of documents and the way the tools are able to audit, tax, and various documents in relation to the financial status of the business. the streamlining of the accounting process will save the organization an ample amount of time to be prepared for the coming financial status that they need to face as the AI will be able to automate the process. The distinguishing part to keep in mind is that the comparison to the manual output of the accounting process and the automated accounting the margin for error is narrow. This means that the possibility of understanding the AI tool's ability to give a proper estimation of the financial position of an organization is able to be matched to manual output however the statement of the tool is overperforming than the manual output of financial process in terms of result is debatable. However, there is the argument of effectiveness as the key is not only to gain the financial performance result but to have them with the least amount of time and conflict to be obtained.

the AI tool can be able to maintain the information that is given is accurate and avoids the tedious task of double-checking the accounting process of the organization. To cut to the chase, the financial performance cannot be compromised, and the process becomes easily maintained for the organization. These are the influences of the tool may have on the organization's acceptance of the use of AI in the sector of financial performance may be permitted as effectiveness is the overall goal of any organization to maintain the balance of cost, time and result will be the key to organization leading AI tools to be used in the financial process.

#### **2.2.4 Decision-making**

The decision-making process is the aspect of an organization is crucial as this determines the path the organization takes in achieving its goal. The ways that AI tools are able to aid in regard to decision-making is by using an AI tool for example ChatGPT the organization can gain access to data stored within the tool to create solutions and options for the company to choose. Varzaru, A. A. 2022 that the use of AI decision-making is more flexible and makes it easy of use to come to a decision instead of the ways of continuously meeting employees to come up with a decision when the answers are within arm's reach of the AI tool.

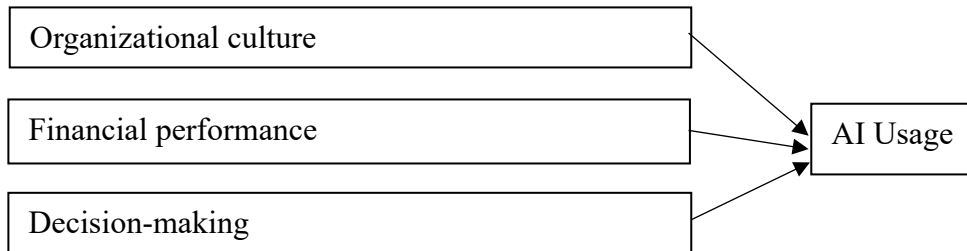
AI cannot only be used to come up with a decision but can even be able to enhance the decision predetermined by the organization in order to be fully proof of their choice as brought up by Hashem, F., & Alqatamin, R. 2021 by using the stored data can be a way for the organization to have reassurance in their decision and be able to see if the AI tool can find a way to improve on the decision made with recommendation and give option that may be improve upon the decision will allow the organization decision to have a source of reference to weight of the decision. The idea that the decision is reviewed upon with the use of AI tools can be used to the advantage of minimizing the organization's oversight of the decision.

Decision-making is complex and a high-stakes situation becomes significant to the organization seeing the different complications that the decision-making process. Based on Loftus, T. J., Tighe, P. J., Filiberto, A. C., Efron, P. A., Brakenridge, S. C., Mohr, A. M., ... & Bihorac, A. 2020 the AI capabilities to run diagnostics can be used in the situation as the decision is integral to the organization and will make the avoidance of error to be critical as such AI prediction usage is the way to ensure the most suitable decision. (Rajagopal, N. K., Qureshi, N. I., Durga, S., Ramirez Asis, E. H., Huerta Soto, R. M., Gupta, S. K., & Deepak, S. 2022) has stated that the usage of AI within the decision-making process is only as effective as the intelligence of the person operating as such within these high-stakes decisions the knowledge to use AI has been the key to successful AI decision-making.

Based on Alufaisan, Y., Marusich, L. R., Bakdash, J. Z., Zhou, Y., & Kantarcioglu, M. 2021, May trust in AI tool's decisions is a topic that comes into question when the fear of AI tools making an error although highly unlikely the result is still the same of distrust on the tool thus the need to insure the data is collected through the right channels and basis are need to ensure the decision making process. The study even brought forward the AI capabilities for prediction data where the AI can create educated outcomes on a situation or decision-making

process to the open possibility of the rippling of the decision. The confidence of the AI decision is to be seen if the organization can operate the tool effectively as the prompt is input by the organization.

### **2.3 Research Framework**



The conceptual framework diagram shows the relationship between the independent and dependent variables which are dependent variables of AI usage, independent variables of organizational culture, financial performance, and decision making. The framework is to show an understanding of the independent variables interaction with the dependent variable for the research to effectively see the commonality of the variable to the main topic as the usage of the AI tools

### **2.4 Hypothesis Development**

Hypotheses are used to predict the relationship between the independent variable and dependent variable, which is the dependent variable of AI usage, the independent variable of organizational culture, financial performance, and decision-making.

H1: There is a significant relationship between organizational culture and AI usage.

Based on Isensee, C., Griese, K. M., & Teuteberg, F. 2021, December There is a significant relationship between AI usage and organizational culture where the integration of AI tools will be impactful to the employee's capability to adapt to the technology and the managers are able to keep up with how properly integrate the tool into their work environment. The test is to show and explore the ways that the employees understand and perceive that AI usage may affect the cultural environment of the organization.

H2: There is a significant relationship between financial performance and AI usage.

Through Hashem, F., & Alqatamin, R. 2021 there is a significant positive relationship between AI usage and financial performance showing that AI tools may improve the efficiency of the financial process as well as be able to streamline the process to determine the financial

performance of the organization are the consideration of the AI usage to have a place in the financial process is the way to show that is the relation of the variables.

H3: There is a significant relationship between decision-making and AI usage.

Based on Alufaisan, Y., Marusich, L. R., Bakdash, J. Z., Zhou, Y., & Kantarcioglu, M. 2022 have shown a significant relationship between AI usage and decision-making. The utilization of AI tools in the process will be able to enhance the decision and even give suggestions of their own but will be able to give insight into the outcome of the decision before acting thus making the organization safe from the unintended risk that they were not aware of at the time show the way that the decision-making process is the influenced by the AI usage is the establishment of the relation between the variables.



## **Chapter 3**

### **3.1 Research design**

Within this section, we are going to investigate the methodology of the research. The beginning of the research methodology is with the research design for the project. Based on Rezigalla, A. A. 2020 the research design is seen as the setup and the how of the collecting of the research data and can be used to analyze and interpret the data gained. the design of the research is key to having an appropriate methodology that reflects the data accurately and precisely to show the result and analysis of the data. The primary factor of the design is the focus on the connection between the questions to relate to the overall research purpose. The research paper is focused on the factors that influence organizations to use AI tools. The paper implements a quantitative and casual research method.

#### **3.1.1 Quantitative research**

Quantitive is the means of quantity of the amount given with information that has been collected within the research and is presented in a numerical value to be analyzed and studied. The paper uses this method to show the relation between the dependent variable, that is the usage of AI tools, and the independent variables which are organizational culture, financial performance, and decision-making. The method consists of using polls, questionnaires, and surveys to collect the data. The data is unbiased and is within a structured format that is used in large samples of a population to gain a basis for their opinions based on Mohajan, H. K. 2020 has set as this will allow the data to be removed from a certain perception or agenda that is seeking to one leaning of the population answers.

#### **3.1.2 Casual research**

The research paper is focused on the Usage of AI tools and the interaction with the different aspects of the organization through culture, financial performance, and decision-making. The paper aims to be able to understand the organization's perspective on the use of the tools and how they form acceptance of the AI technology advancement in their fields. Casual research is the way the variable relates as a cause and effect the case for this research paper is focused on the AI usage factors being culture, financial performance, and decision-making is seen that based on Erickson, G. S. 2017 the casual research is unbiased look through the situation or problem has an effect on the variable and the ways that shapes the inference of

data from the variables maintaining the integrity of the research to be seeking the data that is not influenced to one side .

## **3.2 Sampling design**

### **3.2.1 Target population**

The target population is an utmost importance to the research papers as the question needs to be directed toward a group to find the necessary analysis. This means the population target should be well-defined and kept in check for the purpose of the research analysis. The target population the within the Malaysia and focused on the medical and educational sector. Based on Mohd Arif, M. F. B., & Choo Ta, G. 2022 the medical sector has been through a major pandemic the sector needs a leap in the technological advancement of the sector to counteract these global supervening events. The educational sector can be said to have a progress towards digitalization as seen since COVID-19 has made the use of technology with education is a possiability to be seen within our society .The target population will be given the questionnaire through Google form as the best way for the paper to be able to avoid scheduling or interference with the population, making this a way efficient way of conducting the survey.

### **3.2.2 Sampling location**

There is no sampling location as the questionnaire will be done online through Google Forms to efficiently extract the information this will be able to save time in computing the data as well as the convenience of observation of the data will be able to have accurate analysis.

### **3.2.3 Sampling elements**

The sampling element is needed when conducting research on a population as the need for an element is that the research will be able to have a unit of measurement that can be used for the analysis. To determine the element for the purposes of sampling effectively. This research paper sampling element is the employees of the medical sector within Malaysia the determine the unit of the research.

### **3.2.4 Sampling size**

Sampling size is the proportion to determine the number of questionnaires sent to collect the data for the research. In this case, will need to determine the appropriate sample size for the research. the sample size will need to be based on the population size and should range within a reasonable number of observations to avoid errors. Using the G power to calculate the

sample size with the F test and multiple regression to determine the size appropriate is 120 participants to gain a proper result from the observation. Thus, there would be 120 questionnaires sent to the medical and educational sector workers within Malaysia to be seen as the optimal number to gain a significant understanding of the population.

### **3.2.5 Sampling Technique**

#### **3.2.5.1 Non-probability sampling**

Based on Taherdoost, H. 2016 non-probability sampling is the method that is focused on the random aspect of the population and is best suited to this research. The representative or this case the research for the sampling is the one to find the random elements that are approved for the research to find the intended data as the primary purpose for this technique. Non-probability sampling is suitable as the non-probability sampling does not require a frame to use for reference and is able to be flexible in the application to this situation. The method is even less time-consuming for the questionnaire.

### **3.3 Data collection**

#### **3.3.1 Research instruments**

A research instrument is the measure of the data collected and analyzed. The research instrument in the case for this case study is the Questionnaire. Questionnaires are able to give multiple-choice, paragraph, and as well as linear questioning to gain data from the participant and are simple and easy ways to answer for the participant as the questions are usually to the point.

#### **3.3.2 Design of Questionnaire**

The questionnaire begins with an introduction of the research, the purpose of the research, and the objective that is hoped to be achieved for the research paper. The questionnaire is split into two parts. The first part is to have general information on the demographic, and this is to have a general understanding of the population. The second part of the questionnaire is split into four parts AI usage, organization culture, financial performance, and decision-making, and their overall thoughts on the research of AI usage in organizations. The second part is presented in a Likert-Scale rating.

### **3.3.3 Primary data**

The primary data in the case study is factors that influence organizations to engage with AI-based tools by having the questionnaire sent to businesses within the Selangor region of Malaysia as the target population. Part one of the questionnaires will be used to gain demographic information. The second part will be to have the information on the research topic to collect the data. The questionnaire will be presented in a Google form to 200 applicants and the questionnaire will be distributed through WhatsApp, Facebook, Email, and Telegram to gain the best results and accurate information.

### **3.3.4 Origin of Constructed Question**

Variable	Source
AI Usage	Grover, P., Kar, A. K., & Dwivedi, Y. K. (2022).
Organizational culture	Isensee, C., Griese, K. M., & Teuteberg, F. (2021, December).
	Lingmont, D. N., & Alexiou, A. (2020).
	Zhen, Z., Yousaf, Z., Radulescu, M., & Yasir, M. (2021).
Financial performance	Hashem, F., & Alqatamin, R. (2021).
Decision-making	Hashem, F., & Alqatamin, R. (2021).
	Cao, G., Duan, Y., Edwards, J. S., & Dwivedi, Y. K. (2021).
	Alufaisan, Y., Marusich, L. R., Bakdash, J. Z., Zhou, Y., & Kantarcioglu, M. (2021, May).

### **3.3.5 Likert-Scale rating**

Based on Nemoto, T., & Beglar, D. 2014 Likert scale rating is a type of questionnaire that is used in this research paper. The rating is made as a psychometric scale with multiple choices for the respondent of the questionnaire to indicate their opinion or feeling on the situation, topic, or any relevant issue. The advantage of using this type of questionnaire is that the data is obtained quicker from a large sample size, is reliable gives the respondent estimation, and is highly viable. The range for this questionnaire consists of five points strongly disagree is assigned at 1 and strongly agree is assigned at 5. The scale gives an accurate collection of the

### **3.3.6 Reliability test**

**Table 3.1 Reliability test summary**

	Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
AI Usage	.914	.914	3
Organizational culture	.806	.829	6
Financial performance	.942	.942	2
Decision-making	.936	.936	4

*Generated by SPSS program*

The reliability test is how the consistency and dependence of the test are able to measure the characteristic. This is in order to ensure that the person would take the test again will the score be a similar score or gain a different score thus to see if a similar score for the characteristic's reliability. The test is to have a meaningful interpretation of the score and be able to gain the validity of the study. Based on table 1.1 shows that the Cronbach's Alpha value of AI usage is 0.914, the organizational culture is scored at 0.806. the financial performance and decision-making Cronbach's Alpha are 0.942 and 0.936 respectively. The Cronbach's Alpha value is good by the overall standard being >0.80.

### **3.3.7 Data Checking**

The data-checking process is the way to ensure the accuracy of the data and the ability to accumulate the appropriate resources to establish the research is indeed true. The information is first checked by the source to see whether it is legitimate or not to be used for the purposes of the research as such the source is checked with a keen eye on the author or researcher that had given the data as well as the approval of the data brought forward. After data compilation the next step is to have a secondary viewpoint to see if there are any missed factors or errors made when processing the data.

### **3.4 Proposed Data Analysis Tool**

#### **3.4.1 Descriptive Analysis**

A descriptive analysis is the type of research data that is best described as being able to summarize points of data into a pattern. Highlighting the pattern with reference to previous data will allow the research to have a systemic pattern to follow in their analysis. Based on Sloman, K. N. 2010 can gain an advantage in gathering a baseline for the research and is the most efficient in the case of observation within research. The Analysis is able to find the pattern and behavior for the research to draw certain conclusions and inferences or even compare and contrast the data that is collected. The analysis sees to the demographic nature of the research and be able to find the most perceptible groups patterns towards a certain point of behavior within the case of this research.

#### **3.4.2 Inferential Analysis**

Inferential analysis is very closely related to inferential statistics because this method allows researchers to illustrate and explain the data collected. This is due to the inferential statistics comparing and helping to make judgments involving the dependent and independent variables. This inferential analysis extracts data from the sample of a population to make a statement about the population. Based on Statistics, L. 2013 has stated that the inferential statistic accurately represents the sample of the population to give an estimation of parameters to set for the research and the testing of statistical hypothesis from the conclusive data. The data of the research is seen in the collection of questionnaire responses to the different variables.

#### **3.4.3 Pearson Correlation Coefficient Analysis**

The Pearson correlation coefficient analysis is the method that is used to have an understanding of two continuous variables that measure interest. Based on Schober, P., Boer, C., & Schwarte, L. A. 2018 is the coefficient value is seen to be less than 0.001 is seen to be agreed and can be that the relation is there described as a strong or positive relationship. If the result is seen as the relation is negative or weak is the relation to the variables. The research will see the relationship between AI usage and the organization's culture, financial performance, and decision-making with the aid of the Pearson correlation coefficient analysis.

#### **3.4.4 Multiple Linear Regression Analysis**

Based on Uyanık, G. K., & Güler, N. 2013 explained that the regression analysis is used for the determine the correlation between the two variables and the cause-effect of the prediction of the data result. The case of the research will be able to see the relation of the dependent that is AI usage and the independent variable of organizational culture, financial performance, and decision making. This will show the multiple linear regression analysis is done with each of the independent variables to the independent variable to gain the variation of the data. The analysis of the responses of the 120 respondents are to be computed and properly analyzed to have an understanding of the interaction between the two variables. The model analysis is able to have seen the accounting of the variability of the dependent variables and the rest of the variability is not able to be accounted for in the research capability. The ANOVA is able to gain an understanding of the independent that has the highest impact on the dependent variable. The analysis will be compatible with the research as the data can be interpreted to find the interaction of the variability.

#### **3.5 Measurement construct**

The research of the topic will need measurement construct to base the different scales of the data analysis. The research will need to use a nominal scale and interval scale to ensure the data is presented accurately and the data is the interpreted properly.

##### **3.5.1 Nominal scale**

The Nominal scale is the measurement of the research to see the categorizing and grouping of the data of the respondent based on the scales. The scale is the use of the categorization of such as gender choosing between male and female for there response option. The aspect of the questionnaire of the part 1 is the question based on are gender, age, race , education, and the organization name that the respondents are a part of to be able to categorize the data of the groups in the research and the respondent will have the simpler time to answer these question during the questionnaire.

### **3.5.2 Interval scale**

The interval scale is the metric scale that is used to determine the value of the responses. As the uses of the Likert scale are seen with the scale being 1 is a strongly disagree and 5 is a strongly agree response to the question. The questionnaires that are relevant to the interval scale are within part 2 of each of the different variables with the AI usage, Organizational culture, Financial performance, and the Decision-making questions.



## Chapter 4

### 4.0 Introduction

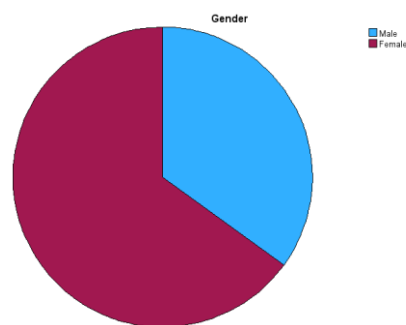
The analysis of the research is done from a descriptive analysis and an inferential analysis. The data was collected from 120 Malaysians. The program used to create and interpret the data is the SPSS program which was used to generate the figures and tables for the purposes of the research. The data is presented in the form of pie charts and tables to show a clear understanding of the data.

### 4.1 Descriptive Analysis

#### 4.1.1 Gender

Based on the data collected the gender of the male respondent is the frequency of 42 with a valid percentage of 35% and the frequency of females is 78 that is the majority, and the percentage of the female is 65% as shown in the table 4.1.1 and figure 4.1.1.

**Figure 4.1.1 Gender**



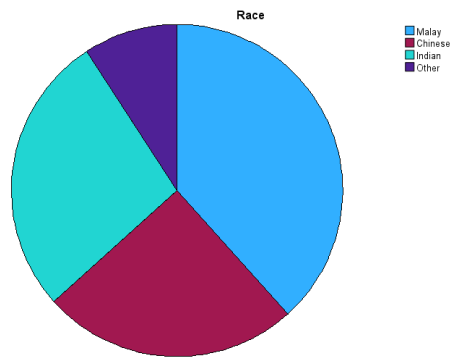
**Table 4.1.1 Gender**

<b>Gender</b>					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	42	35.0	35.0	35.0
	Female	78	65.0	65.0	100.0
	Total	120	100.0	100.0	

### 4.1.2 Race

As seen in the table 4.1.2 and figure 4.1.2 the frequency of Malay is the highest at 46 and 38.3% followed by a frequency of 33 and a percentage of 27.5% with Indian respondents. The Chinese respondents have a frequency of 30 and a percentage of 25%. The remaining is a frequency of 11 and a percentage of 9.2%.

**Figure 4.1.2 Race**



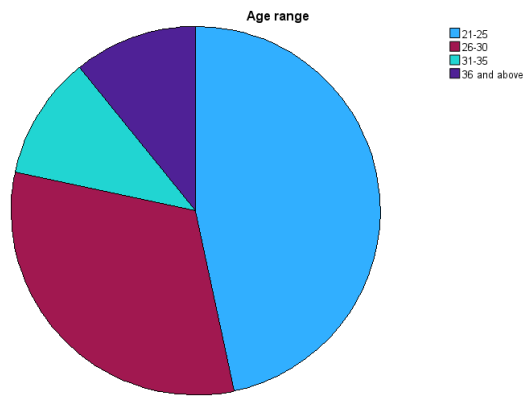
**Table 4.1.2 Race**

<b>Race</b>					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Malay	46	38.3	38.3	38.3
	Chinese	30	25.0	25.0	63.3
	Indian	33	27.5	27.5	90.8
	Other	11	9.2	9.2	100.0
	Total	120	100.0	100.0	

### 4.1.3 Age

The age range that is the most frequent is 56 which is the age range of 21-25 years old with a percentage of 46.7%. The second most frequent is 38 with a percentage of 31.7% which is 26-30 years old. The last two age ranges are the same frequency and percentage a 13 frequency and a percentage of 10.8% as seen in the table 4.1.3 and figure 4.1.3 below.

**Figure 4.1.3 Age**



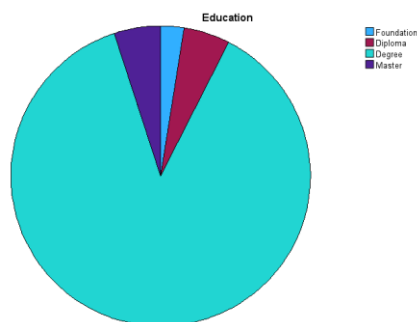
**Table 4.1.3 Age**

Age range					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	21-25	56	46.7	46.7	46.7
	26-30	38	31.7	31.7	78.3
	31-35	13	10.8	10.8	89.2
	36 and above	13	10.8	10.8	100.0
	Total	120	100.0	100.0	

**4.1.4 Education**

The highest frequency is 105 for people with degrees with their education level with a percentage of 87.5%. the lower tier of education level being the foundation level has a frequency level of 3 and the percentage is 2,5%. The last two have their frequency and percentage are similar, 6 and 5% respectively as seen in the table 4.1.4 and figure 4.1.4

**Figure 4.1.4 Education**



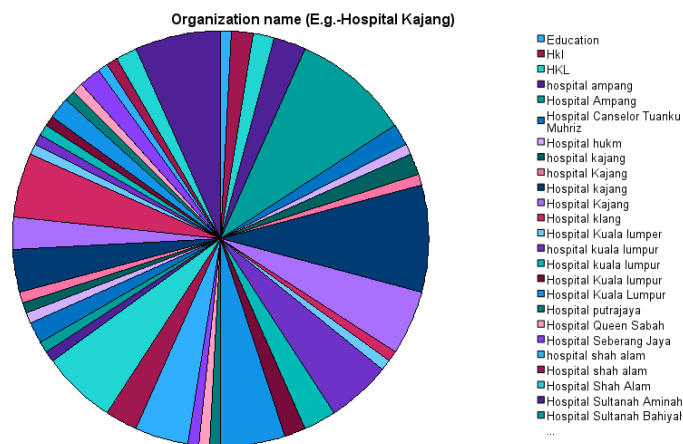
**Table 4.1.4 Education**

Education					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Foundation	3	2.5	2.5	2.5
	Diploma	6	5.0	5.0	7.5
	Degree	105	87.5	87.5	95.0
	Master	6	5.0	5.0	100.0
	Total	120	100.0	100.0	

**4.1.5 Organization**

The organization is a string-based item as the names are nominal can be seen that there is a frequency of organizations being Hospital Kajang, Klang, Kuala Lumpur, Putrajaya, Shah Alam, etc in terms of the medical sector of the sample and the presence of education sector is SK Sri Cheras, SK Convent Kajang etc and the figure 4.1.5 shows the reference of the data.

**Figure 4.1.5 Organization**



#### **4.1.6 Descriptive Statistic**

The use of the 5-point Likert-type that shows 1 to 5 is “strongly disagree” to strongly agree on the scale. As seen in the table 4.1.6 the highest mean is 3.6708 that being financial performance and the lowest mean is stated to be 3.3778 with usage of AI. The marginal means for both organizational culture and decision-making are 3.5056 and 3.6333 respectively. the overall construct leans towards agreeing on the scale.

**Table 4.1.6 Descriptive Statistics**

<b>Descriptive Statistics</b>			
	Mean	Std. Deviation	N
AU	3.3778	.81642	120
OC	3.5056	.65463	120
FP	3.6708	.94934	120
DM	3.6333	.93144	120

## **4.2 Inferential Analysis**

### **4.2.1 Pearson Correlation Coefficient Analysis**

The table shows that AI usage has received a p-value of less than 0.001 for each of the independent variables organizational culture, financial performance, and decision-making. Thus, there is a positive correlation suggested with H1, H2, and H3 are significant at 0.01.

**Table 4.2.1 Pearson Correlation Coefficient Analysis**

<b>Correlations</b>					
		<b>AU</b>	<b>OC</b>	<b>FP</b>	<b>DM</b>
<b>AU</b>	<b>Pearson Correlation</b>	1	.684**	.494**	.637**
	<b>Sig. (2-tailed)</b>		<.001	<.001	<.001
	<b>N</b>	120	120	120	120
<b>OC</b>	<b>Pearson Correlation</b>	.684**	1	.635**	.787**
	<b>Sig. (2-tailed)</b>	<.001		<.001	<.001
	<b>N</b>	120	120	120	120
<b>FP</b>	<b>Pearson Correlation</b>	.494**	.635**	1	.711**
	<b>Sig. (2-tailed)</b>	<.001	<.001		<.001
	<b>N</b>	120	120	120	120
<b>DM</b>	<b>Pearson Correlation</b>	.637**	.787**	.711**	1
	<b>Sig. (2-tailed)</b>	<.001	<.001	<.001	
	<b>N</b>	120	120	120	120

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

### **4.2.2 Multiple Linear Regression Analysis**

The table shows that the independent variable accounted for 49% of the variability to 51% which is accounted for by unknown causes as the AI usage of the organization. The result is based on the R-Square is 0.494.

**Table 4.2.2 Multiple Linear Regression Analysis (Model Summary)**

<b>Model Summary</b>									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.703 <sup>a</sup>	.494	.481	.58831	.494	37.723	3	116	<.001
a. Predictors: (Constant), DM, FP, OC									

As the p-value is less than 0.001 and the F-ration is 37.723 the significance level of 0.05 indicates that there is a significant association between the decision-making, financial performance, and organizational culture is dependable to the AI usage within the organization.

**Table 4.2.3 Multiple Linear Regression Analysis (ANOVA)**

<b>ANOVA<sup>a</sup></b>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	39.169	3	13.056	37.723	<.001 <sup>b</sup>
	Residual	40.149	116	.346		
	Total	79.319	119			

a. Dependent Variable: AU

b. Predictors: (Constant), DM, FP, OC

## **Chapter 5**

### **5.1 Major Findings**

The status research hypothesis can show a positive relationship between the dependent variable and independent variable with the use of the p-value being less than 0.05. this will be able to show whether the hypothesis is accepted or rejected.

Hypotheses	Significant (P-value)	Level	Results
H1: There is a significant positive relationship between organizational culture and AI usage	<0.001		Accepted
H2: There is a significant positive relationship between financial performance and AI usage	<0.001		Accepted
H3: There is a significant positive relationship between decision-making and AI usage	<0.001		Accepted

#### **5.1.1 Organizational Culture**

H1: There is a significant positive relationship between organizational culture and AI usage

RO1: To examine the relationship between AI tools' influence on organizational culture and AI usage

RQ1: Does organizational culture affect the use of AI tools

As the result shows the p-value is less than 0.001 is seen as there is a significant positive relationship between AI usage and organizational culture. Thus, the H1 is accepted. The point from the Isensee, C., Griese, K. M., & Teuteberg, F. 2021, December is that employees are able to capable of adopting the technology and are able to keep up with the integration of the tools. The relationship is seen as a positive position between the variables and there is an effect from the independent variable to the dependent variable.



### **5.1.2 Financial performance**

H2: There is a significant positive relationship between financial performance and AI usage

RO2: To examine the relationship between AI tools' influence on financial performance and AI

RQ2: Does financial performance affect the use of AI tools

The AI usage having the affects the financial performance as seen through Hashem, F., & Alqatamin, R. 2021 is the progression to the efficiency of the process of the accurate financial position is key to an effective organization. The result is shown that a p-value is less than 0.001 can bring forward that there is a significant positive relationship between AI usage and financial performance. Thus, can be shown that H2 is accepted for the research finding.

### **5.1.3 Decision-making**

H3: There is a significant positive relationship between decision-making and AI usage

RO3: To examine the relationship between AI tools' influence on decision-making and AI

RQ3: Does decision-making affect the use of AI tools.

The decision-making has there p-value is less than 0.001 showing the positive significant relationship between AI usage and decision-making. The based on Alufaisan, Y., Marusich, L. R., Bakdash, J. Z., Zhou, Y., & Kantarcioglu, M. 2021 is the enhancement to the decision with an ability of the foresight to give the organization an awareness of risk that are unseen to the organization and with the use can even bring the decision acceptability to organization can gain the confidence to the decision-making process. This means that the H3 can be accepted. There can be seen that the decision making is affected by the AI tools influenced.

## **5.2 Implications of the Study**

Studies have shown that factors that influence organizations to engage with AI-based tools have positive relationships with the organization's culture, financial performance, and decision-making. The research in question is to analyze and understand the Factors that influence organizations to engage with AI-based tools. As a measure of the business performance to determine the significant effects of the AI tools. The research sees how the use of the AI tool can help shape an organization's culture around data that is given to the tool. The exploration of how an AI can lead to financial calculation and determine the route to optimize the organization's resources to achieve a desired financial position. Lastly, AI computing has been capable of giving decisive answers that can affect decision-making within an organization.

In detail the different relationships between the variables. The AI-based tools can affect the organization's culture as seen in the movement of the culture to be made to a proactive towards a technology-accepted environment is able to have there in a progress to innovation. The changes to the culture are the organization needs to keep the modernization of there operation are the ways that AI tools are affecting to the day-to-day interaction and change to the social interaction of the organization between members with the technology implementation and will the tool keep the goals of the organization culture aligned.

The case of financial performance sees the confidence in the response to the financial performance be tracked with the use of AI-based tools will be effective to have the achieving a similar result to the manual output and is further seen as the more efficient in the accounting process. There is even the positive leaning that errors in the accounting process can be avoided with the use of AI tools as the perception that having a machining learning system is capable of avoiding the common mistake made by the manual output of the process.

The data was shown in the decision-making process of the responses to the questionnaire has shown that to AI tools aid in the decision-making process is prevalently positive. The idea of using AI tools can form and contemplate the decision and give suggestions to a make improvements to the decision and even be able to give the chance for the AI tool to provide to the user with an optimal decision. The movement towards the use of AI tools can give the chance of a greater understanding of decisions made with the preparation of the data presented as an informed decision will be able to minimize the uncertainty of the decision.

### **5.3 Limitations of the Study**

The study has shown that certain limitations have been presented to fully assess the research topic. One of those limitations is the small sample size used for the study. As the study has a limit of 120 respondents there is room for improvement for the data to be collected in a wider area can be used to gain a better insight into the populace's understanding of the topic. This issue is made by the limit to that sample cannot have a complete understanding of the population but an inference to the information gathered. The lower the sample can affect the data in the sense there is not a wider perception of the research as the research looks through the scope of the organization as a whole to the topic at hand.

This leads to the aspect of the research having limited resources to gain a wide populace to gain those results and the limited resource does limit the capabilities of the research. The research was done with the use of commonly used research tools such as the SPSS program and Google form to collect and analyze the data. The limit of resources can limit the potential of capturing and analyzing independent variables of the raw data. The fewer resources available for the research will limit the process of gaining a chance to explore the data through different methodologies and the possibility of having an interactive part of the research for participants as a contribution to the research.

The limitation that is the most prominent is the focused demographic of sending the survey to members within the organization of both medical and education fields the limiting is the factor of the data being able to encompass other organizations as the data will only be able to effectively show the result of these respondents to the sector. The narrow demographic is the result of the limit that the research can gather with these capabilities and connections of the researcher. By having the medical sector and educational sector as the sample of the research is unable to capture the sectors of organizations that may be involved with the use of AI-based tools. The demographic being a wider in margin is to effectively have the most response however at the cost of fully understanding a set group of the population the data have a surface-level understanding through the respondents.

In short, the limitations listed are the reasoning for the research to be unable to gain a deeper understanding of the research topic and the capacity of the research to have a wider exploration of the research topic as well as the testament to having clarification on the different relationship with the variables on a wider sample with a more focused demographic to maintain a clear picture of the application of the AI-based tools effect on the different groups.

#### **5.4 Recommendations for Future Research**

The sample size increase will be able to have a better understanding of the study within the country. The large sample can be able to have responses of higher members within an organization can reflect the best result for the study to test the independent variable of organizational culture, financial performance, and decision-making process with AI usage. Thus, making the result have a greater legitimacy to the overall study of the research. The size of the sample increase is the consensus that the data is a baseline understanding of the research topic and is unable to have a wider scope of reference to test the different hypotheses of the independent and dependent variables of the research. As the research can be used to the inference the population responses there is still a need of having a greater sample for an accurate understanding.

Next, the recommendation for future studies is the improvement to the demographic of the demographic can be expanded upon from just the area of the medical and educational sector as such the research can look through industrial, entertainment, and business to be able to have the result see if there is a difference in opinion between the sectors. The capabilities of recording the different races and organizations can improved upon within the study. The focus on the demographics of the research will allow the data to be able to understand the specific groups of organizations against one another. There can be a comparison between different organization sectors to see which are accepting of AI-based tools being integrated into their organization and those that view them in a negative perception of the use of AI-based tools and will reject the integration.

Finally, to effectively have the amount of data be recorded and analyzed properly there will be a need for a greater pool of resources. The ability to have the data collected with accuracy and there can even implement additional research methods such as face-to-face interviews were not possible with the study. The chance to gain information through interviews and interactive methods can allow the researcher to have hands-on experience with the data source being the possibility of gaining the reasoning of the target population for certain responses and the thought process behind the decisions for the response.

In summary, the recommendation is to cast a wider net to the population and separate them with a more focused study on each sector's responses to AI-based tools and the relation with the organization culture, financial performance, and decision-making aspect can be explored with greater depth of understanding.

## **5.5 Conclusion**

In conclusion, the study has shown a positive relationship between the dependent variable with each of the independent variables. The research on the usage of AI with the independent variable of organizational culture, financial culture, and decision-making process is shown to correlate with each other. The research should be considered with the limitations that have been presented and should consider the recommendation for future research.

## **Reference list**

- Kelly, S., Kaye, S. A., & Oviedo-Trespalacios, O. (2022). What factors contribute to the acceptance of artificial intelligence? A systematic review. *Telematics and Informatics*, 101925. Retrieved from <https://www.sciencedirect.com/science/article/pii/S0736585322001587>
- Rahman, M. S., Bag, S., Gupta, S., & Sivarajah, U. (2023). Technology readiness of B2B firms and AI-based customer relationship management capability for enhancing social sustainability performance. *Journal of Business Research*, 156, 113525. Retrieved from <https://www.sciencedirect.com/science/article/pii/S0148296322009900>
- Khan, F. H., Pasha, M. A., & Masud, S. (2021). Advancements in microprocessor architecture for ubiquitous AI—An overview on history, evolution, and upcoming challenges in AI implementation. *Micromachines*, 12(6), 665. Retrieved from <https://www.mdpi.com/2072-666X/12/6/665/pdf>
- Venkatesh, V. (2022). Adoption and use of AI tools: a research agenda grounded in UTAUT. *Annals of Operations Research*, 1-12. Retrieved from [https://vtechworks.lib.vt.edu/bitstream/handle/10919/110343/Venkatesh\\_AOR\\_2021.pdf?sequence=2&isAllowed=y](https://vtechworks.lib.vt.edu/bitstream/handle/10919/110343/Venkatesh_AOR_2021.pdf?sequence=2&isAllowed=y)
- Lee, J., Suh, T., Roy, D., & Baucus, M. (2019). Emerging technology and business model innovation: the case of artificial intelligence. *Journal of Open Innovation: Technology, Market, and Complexity*, 5(3), 44. Retrieved from <https://www.mdpi.com/2199-8531/5/3/44/pdf>
- Wang, P. (2019). On defining artificial intelligence. *Journal of Artificial General Intelligence*, 10(2), 1-37. Retrieved from <https://sciendo.com/downloadpdf/journals/jagi/10/2/article-p1.pdf>
- Isensee, C., Griese, K. M., & Teuteberg, F. (2021, December). Sustainable artificial intelligence: A corporate culture perspective. In *Sustainability Management Forum| NachhaltigkeitsManagementForum* (Vol. 29, No. 3-4, pp. 217-230). Berlin/Heidelberg: Springer Berlin Heidelberg. Retrieved from <https://link.springer.com/article/10.1007/s00550-021-00524-6>
- Lingmont, D. N., & Alexiou, A. (2020). The contingent effect of job automating technology awareness on perceived job insecurity: Exploring the moderating role of organizational culture. *Technological Forecasting and Social Change*, 161, 120302. Retrieved from <https://www.sciencedirect.com/science/article/pii/S0040162520311288>
- Zhen, Z., Yousaf, Z., Radulescu, M., & Yasir, M. (2021). Nexus of digital organizational culture, capabilities, organizational readiness, and innovation: Investigation of SMEs operating in the digital economy. *Sustainability*, 13(2), 720. Retrieved from <https://www.mdpi.com/2071-1050/13/2/720/pdf>
- Hashem, F., & Alqatamin, R. (2021). Role of artificial intelligence in enhancing the efficiency of accounting information system and non-financial performance of the manufacturing companies. *International Business Research*, 14(12), 1-65. Retrieved from <https://pdfs.semanticscholar.org/5a30/b401ee2793f9563847c48ff1e60f3835d5a2.pdf>

- Varzaru, A. A. (2022). Assessing Artificial Intelligence Technology Acceptance in Managerial Accounting. *Electronics* 2022, 11, 2256. Retrieved from <https://pdfs.semanticscholar.org/026d/a1e614ff17bc5bc367a5c349f61eeeb2f812.pdf>
- Alufaisan, Y., Marusich, L. R., Bakdash, J. Z., Zhou, Y., & Kantarcioglu, M. (2021, May). Does explainable artificial intelligence improve human decision-making?. In *Proceedings of the AAAI Conference on Artificial Intelligence* (Vol. 35, No. 8, pp. 6618-6626). Retrieved from <https://ojs.aaai.org/index.php/AAAI/article/download/16819/16626>
- Rezigalla, A. A. (2020). Observational study designs: Synopsis for selecting an appropriate study design. *Cureus*, 12(1). Retrieved from <https://www.cureus.com/articles/25270-observational-study-designs-synopsis-for-selecting-an-appropriate-study-design.pdf>
- Mohajan, H. K. (2020). Quantitative research: A successful investigation in natural and social sciences. *Journal of Economic Development, Environment and People*, 9(4), 50-79. Retrieved from [https://mpr.ub.uni-muenchen.de/105149/1/MPRA\\_paper\\_105149.pdf](https://mpr.ub.uni-muenchen.de/105149/1/MPRA_paper_105149.pdf)
- Erickson, G. S. (2017). Causal research design. In *New methods of market research and analysis* (pp. 78-105). Edward Elgar Publishing. Retrieved from <https://www.elgaronline.com/display/9781786432681/chapter04.xhtml>
- Acharya, A. S., Prakash, A., Saxena, P., & Nigam, A. (2013). Sampling: Why and how of it. *Indian Journal of Medical Specialties*, 4(2), 330-333. Retrieved from [https://www.researchgate.net/profile/Anita-Acharya-2/publication/256446902\\_Sampling\\_Why\\_and\\_How\\_of\\_it\\_Anita\\_S\\_Acharya\\_Anupam\\_Prakash\\_Pikee\\_Saxena\\_Aruna\\_Nigam/links/0c960527c82d449788000000/Sampling-Why-and-How-of-it-Anita-S-Acharya-Anupam-Prakash-Pikee-Saxena-Aruna-Nigam.pdf](https://www.researchgate.net/profile/Anita-Acharya-2/publication/256446902_Sampling_Why_and_How_of_it_Anita_S_Acharya_Anupam_Prakash_Pikee_Saxena_Aruna_Nigam/links/0c960527c82d449788000000/Sampling-Why-and-How-of-it-Anita-S-Acharya-Anupam-Prakash-Pikee-Saxena-Aruna-Nigam.pdf)
- Singh, A. S., & Masuku, M. B. (2014). Sampling techniques & determination of sample size in applied statistics research: An overview. *International Journal of economics, commerce and management*, 2(11), 1-22. Retrieved from [https://www.academia.edu/download/65225177/21131\\_IJECM.pdf](https://www.academia.edu/download/65225177/21131_IJECM.pdf)
- Taherdoost, H. (2016). Sampling methods in research methodology; how to choose a sampling technique for research. How to choose a sampling technique for research (April 10, 2016). Retrieved from <https://hal.science/hal-02546796/file/Sampling%20Method%20in%20Research%20Methodology;%20How%20to%20Choose%20a%20Sampling%20Technique%20for%20Research.pdf>
- Nemoto, T., & Beglar, D. (2014). Likert-scale questionnaires. In *JALT 2013 conference proceedings* (pp. 1-8). Retrieved from [https://jalt-publications.org/sites/default/files/pdf-article/jalt2013\\_001.pdf](https://jalt-publications.org/sites/default/files/pdf-article/jalt2013_001.pdf)
- Sloman, K. N. (2010). Research trends in descriptive analysis. *The Behavior Analyst Today*, 11(1), 20. Retrieved from <https://psycnet.apa.org/journals/bar/11/1/20.pdf>
- Statistics, L. (2013). Descriptive and inferential statistics. Retrieved from <https://wbsche.wb.gov.in/assets/pdf/Political-Science/Descriptive-and-Inferential-statistics.pdf>

- Jo Hatch, M., & Schultz, M. (1997). Relations between organizational culture, identity, and image. *European Journal of marketing*, 31(5/6), 356-365. Retrieved From <https://www.academia.edu/download/89371733/Relations-between-organizational-culture-identity-and-image.pdf>
- Hindasah, L., & Nuryakin, N. (2020). The relationship between organizational capability, organizational learning and financial performance. *Journal of Asian Finance, Economics and Business*, 7(8), 625-633. Retrieved from <https://www.academia.edu/download/91541212/JAKO202026061031750.pdf>
- Manser Payne, E. H., Dahl, A. J., & Peltier, J. (2021). Digital servitization value co-creation framework for AI services: a research agenda for digital transformation in financial service ecosystems. *Journal of Research in Interactive Marketing*, 15(2), 200-222. Retrieved <https://www.emerald.com/insight/content/doi/10.1108/JRIM-12-2020-0252/full/html>
- Shiyyab, F. S., Alzoubi, A. B., Obidat, Q. M., & Alshurafat, H. (2023). The Impact of Artificial Intelligence Disclosure on Financial Performance. *International Journal of Financial Studies*, 11(3), 115. Retrieved from <https://www.mdpi.com/2227-7072/11/3/115>
- Loftus, T. J., Tighe, P. J., Filiberto, A. C., Efron, P. A., Brakenridge, S. C., Mohr, A. M., ... & Bihorac, A. (2020). Artificial intelligence and surgical decision-making. *JAMA surgery*, 155(2), 148-158. Retrieved from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7286802/>
- Rajagopal, N. K., Qureshi, N. I., Durga, S., Ramirez Asis, E. H., Huerta Soto, R. M., Gupta, S. K., & Deepak, S. (2022). Future of business culture: an artificial intelligence-driven digital framework for organization decision-making process. *Complexity*, 2022, 1-14. Retrieved from <https://www.hindawi.com/journals/complexity/2022/7796507/>
- Mohd Arif, M. F. B., & Choo Ta, G. (2022). Covid-19 pandemic management: a review of the digitalisation leap in Malaysia. *Sustainability*, 14(11), 6805. Retrieved from <https://www.mdpi.com/2071-1050/14/11/6805>
- Ayling, J., & Chapman, A. (2022). Putting AI ethics to work: are the tools fit for purpose?. *AI and Ethics*, 2(3), 405-429. Retrieved from <https://link.springer.com/article/10.1007/s43681-021-00084-x>
- Schober, P., Boer, C., & Schwarte, L. A. (2018). Correlation coefficients: appropriate use and interpretation. *Anesthesia & analgesia*, 126(5), 1763-1768. Retrieved from [https://journals.lww.com/anesthesia-analgesia/Fulltext/2018/05000/Correlation\\_Coefficients\\_Appropriate\\_Use\\_and.50.aspx](https://journals.lww.com/anesthesia-analgesia/Fulltext/2018/05000/Correlation_Coefficients_Appropriate_Use_and.50.aspx)
- Uyanık, G. K., & Güler, N. (2013). A study on multiple linear regression analysis. *Procedia-Social and Behavioral Sciences*, 106, 234-240. Retrieved from [https://www.sciencedirect.com/science/article/pii/S1877042813046429/pdf?md5=da62147e64e2f356bfe6696b4f8031c1&pid=1-s2.0-S1877042813046429-main.pdf&\\_valck=1](https://www.sciencedirect.com/science/article/pii/S1877042813046429/pdf?md5=da62147e64e2f356bfe6696b4f8031c1&pid=1-s2.0-S1877042813046429-main.pdf&_valck=1)



**Appendices**

**Appendices 1.1 Questionnaire**



**UNIVERSITI TUNKU ABDUL RAHMAN  
FACULTY OF ACCOUNTANCY AND MANAGEMENT  
UKMZ3016 RESEARCH PROJECT**

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<b>FYP Coordinator</b>	<b>Yeong Wai Mun</b>

# Factors that influence organizations to engage with AI-based tools

Greetings. My name is Amretjit Singh Khalae, a student in Bachelor of International Business (Y3S2) at Universiti Tunku Abdul Rahman (UTAR). I am currently conducting a research project with the topic of " Factors that influence organizations to engage with AI-based tools".

You are invited to participate in this research by filling up this questionnaire.

This survey aims to examine the Factors that influence organizations to engage with AI-based tools. The survey is to understand the factor that influences organizations to engage with AI-based tools. Please take a few minutes to complete and return this questionnaire.

Your cooperation is greatly appreciated for the successful collection of this research data. Please do not hesitate to contact me via email: [amretjitkhalae@gmail.com](mailto:amretjitkhalae@gmail.com).

The collected data serves academic purposes and will be aggregated with personal information being revealed.

I hereby consent to my voluntary participation in this survey which will be conducted anonymously. (As proposed accordingly by Personal Data Protection Statement - UTAR)

Yes, proceed to the questionnaire

## **Part 1**

Instruction: Please select and tick the box next to your accurate option or write in the space provided. Please tell us more about your personal and organizational information.

1. Gender
  - Male
  - Female
2. Race
  - Malay
  - Chinese
  - Indian
  - Others:
3. Age range
  - 21-25
  - 26-30
  - 31-35
  - 36 and above
4. Education
  - Secondary school (SPM)
  - Foundation
  - Diploma
  - Degree
  - Master
  - Others:
5. Organization Name

## **Part 2**

Instruction: Please select and tick the box next to your accurate option or write in the space provided. Please tell us your honest opinions about these factors.

Please indicate how much you agree or disagree with each of the following statements based on a scale ranging from 1 (strongly disagree) to 5 (strongly agree)

- Strongly Disagree (SD)
- Disagree (D)
- Neutral (N)
- Agree(A)
- Strongly Agree (SA)

### **Usage of AI**

	SD	D	N	A	SA
The usage of AI enhances product quality.					
The usage of AI to construct algorithms to better resource planning					
The usage of AI to reduce the defect rates					

### **Organizational culture**

	SD	D	N	A	SA
Organizations will have a pro-environment towards the use of technology					
Jobs will be replaced by AI technology automation					
Offers AI technology training to employees for new career paths within the organization					
The organization will share AI technology strategy and innovation with its culture					
The introduction of this AI technology will change the organizational culture					
AI can align with the company's goals					

### **Financial performance**

	SD	D	N	A	SA
AI will be better than manual output for accounting					
AI can avoid errors within the accounting process					

### **Decision-making**

	SD	D	N	A	SA
The usage of AI has the ease of flexibility of decision making					
AI can enhance decision-making based on stored data					
AI will be useful in quick decision-making.					
Using AI within decision-making gives confidence in the decision					