SCIENTIFIC RESEARCH AND REPORT WRITING FINAL PROJECT



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1. INTRODUCTION

There are two main important steps in the research works. These are analysis, and a good research text releated to research problem. These steps should be answer to questions of work.

Introduction part is including approaches about hypotheses of the problems, and this part can provide to readers a good opportunity for evaluating to research work. Readers can understand the guideline of research work in the introduction part.

In this research work, we will try to explain "What's the relationship between feasibility reports and Artificial Intelligence" and "How we can use the Artificial Intelligence during the prepare feasibilty reports". We used and we will use some steps such as Literature reviews, collection data, data analysis, research hypotheses and like this.

2. PURPOSES AND OBJECTIVES OF THE STUDY

The basic objective of research work is relationship between feasibility reports with Artificial Intelligence and how we can use Artificial Intelligence during the prepare feasibility reports.

In today's technological world, we are using the Artificial Intelligence in our life's every moment and every sector in the market.

In the 21st century, being a entrepreneurship is the most efficient way of the earning life and make money. So, if someones want to be entrepreneurship and if someones want to found a new business, or if some companies want to invest, they must have a feasibility report.

Feasibility reports are including critical informations about sector and new business but prepare to this reports are not easy. It should be easy way to prepare feasibility reports. If software experts and people who has an authorize and knowledge about prepare to feasibility reports can collaboration with each other, they can find an easy way. If they success it, these reports can prepared by experts to easily and quickly.

This research work's purposes is as under:

- 1- Provide to time saving to people who is expert of prepare to feasibility reports.
- 2- Collecting more true information about feasibility reports with technological opportunities.
- 3- Analysis and compare old reports and new reports with Artificial Intelligence.
- 4- To minimize the possibility of errors in the feasibility reports.
- 5- To increase the functions of feasibility reports.
- 6- Prevention of financial losses due to errors in reports
- 7- Prevention of environmental pollution

3. RESEARCH HYPOTHESES

Hypotheses are key parts of a research works because hypotheses are proposition designed to establish relationships between events. Hypotheses are scientific methods and to link events to causes. In this research, we will use some types of hypothesis such as basic hypothesis, complex hypothesis, logical hypothesis, statistical hypothesis etc.

There are 5 hypotheses in this research. These are:

- 1. There is a relationship between investing activities and feasibility reports.
 - Feasibility reports can affect both positive and negative sides. It can be change according to experts' opinion who is prepare this report. Investors need to feasibilty reports.
- 2. There is a relationship between preparing feasibility reports and Artificial Intelligence.
 - Artificial Intelligence has a positive impact. If experts who prepare feasibility reports use to artificial intelligence and new technology, they can save time and they can trust old datas for compare.
- 3. There is a relationship between exact analysis made in the feasibility report and the profit ratio of the enterprise / investment.
 - Feasibility reports has a positive impact. If experts prepare exact and complete report, investors or entrepreneurs can make more money and their companies/invest's profit rate can increase easily.

- 4. There is a relationship between truth of the feasibility reports and environment pollution.
 - Feasibility reports has a negative impact. If experts prepare wrong report, it can be cause to environment pollution. For example, if feasibility report says "That field is available for establish a factory" and if report is including wrong informations and errors, it can be cause environment pollution. Authorized organizations should task surveyor and good experts.
- 5. There is a relationship between truth of feasibility reports and Artificial Intelligence.
 - Artificial Intelligence has a positive impact. If experts who prepare feasibility reports use to artificial intelligence and technological opportunities, these opportunities can contribute efficiently. Artificial intelligence and technological opportunities can prevent lack of information and wrong information in the feasibility reports.

4. LIMITATION AND DELIMITATION OF THE STUDY

4.1. Delimitation of the Study

The study was delimited to the followings:

- In this study, the effect of the feasibility report on the feasibility report of entrepreneurial firms and artificial intelligence was examined.
- The current study is restricted by the impact of the feasibility report on the firms and the effect of the artificial intelligence on the feasibility report.

4.2. Limitation of the Study

• The effects of the feasibility report on firms and how the artificial intelligence work were outside the control of the researchers.

• The results of the feasibility report are beyond the control of the investigator.

5. RESEARCH METHODOLOGY

The present study was predominantly descriptive in nature as its primary aim was to make a feasibility report more precise and to identify and examine the positive or negative impacts of the feasibility report. A descriptive study describes and interprets the data collected. It is concerned with conditions or relationships that exist, opinions that are held, processes going on, effects that are evident, or trends that are developing. It is primarily concerned with the present, although it often considers past events and influences as they relate to current conditions.

5.1. Research Design

Kothari (2004) says the research design is the conceptual structure within which the research is conducted; it constitutes the blueprint of the collection, measurement and analysis of data. As such the design includes an outline of what the researcher will do from writing the hypothesis and its operational implications to the final analysis of data. So the research design can be defined as a plan, structure and strategy of a research to find out alternative tools to solve the problems and to minimize the variances.

6. POPULATION AND SAMPLE

Target population of the study is the engineers who write the feasibility reports , and investors in Ankara. Considering the expansion of the population a sample was selected randomly.

For the purpose of this study 200 engineers, and 100 investors were chosen as the sample of the study from Ankara.

Figure 1. Engineers Sample

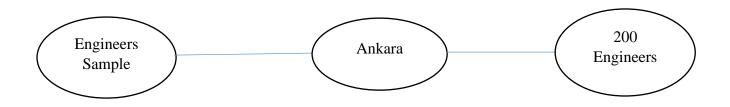
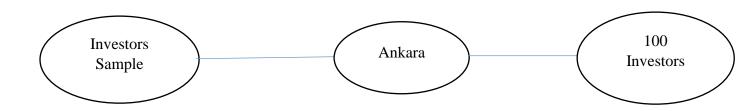


Figure 2. Investors Sample



7. DATA COLLECTION METHOD

For the purpose of this study, two methods were used to gather data required to answer the research hypotheses: (a) related Literature review, (b) self-developed survey instrument.

For this purpose, two questionnaires were developed by the researcher in order to address the research hypotheses, and to study the relationships among variables:

- 1- feasibility reports are independent variables,
- 2- investments are dependent variables.

Primary & Secondary Data

Both primary and secondary data were used for the study.

Primary Data: The primary data for the study was collected through questionnaire developed by the researcher.

Secondary Data: Publications such as books, critical essays, comparative studies and journal articles, newspapers & magazines, conference papers, reports and other documents produced on the effect of homework on learning and academic achievement serve as secondary sources for this research.

Furthermore, non-written or media-based materials, archives, electronic database, websites, etc. are also used as secondary sources in this project. These sources provide information about the related literature of the study.

To collect data through secondary sources of data, some sources including the 12 internet (websites) and external sources were used. To collect secondary data, library (external sources) was privileged and the internet as another source of secondary data with the fewer application was utilized.

Internet: Therefore, to collect data, many websites in the internet were used and only those data were picked out of those original sources of those data could be found out. For this study the valuable websites/ search engine such as Google was utilized.

External Resources: For this study some libraries such as engineering department library, Ankara University' Library have been utilized.

7.1. Description of Instruments

In this step the scale of every question for the purpose of measuring the answers of the respondents was determined. To collect primary data through questionnaire, one close-ended, Lickert Scale questionnaires was developed by the researcher.

Engineers Questionnaire (EQ): EQ survey's questions were designed engineers perspective on the effect of using artificial intelligence on feasibility reports in businesses, and investments.

EQ questionnaire consisted of 24 close-ended questions. These items requested respondents' perspective on the effect of using artificial intelligence on feasibility reports:

- (1) Objectives of feasibility reports
- (2) Positive & negative effects of artificial intelligence
- (3) Types of investments
- (4) Amount of using artificial intelligence in businesses

All of the items in the survey utilized a five point Lickert scale.

Investor Questionnaire (IQ): IQ survey's questions were designed engineers perspective on the effect of using artificial intelligence on feasibility reports in businesses, and investments.

IQ questionnaire consisted of 20 close-ended questions. These items requested respondents' perspective on the effect of using artificial intelligence on feasibility reports:

- (1) Objectives of feasibility reports
- (2) Positive & negative effects of artificial intelligence
- (3) Types of investments
- (4) Amount of using artificial intelligence

All of the items in the survey utilized a five point Lickert scale.

7.2. Pilot Study

To assess the content validity of the questionnaires, two procedures were used: (1) a group of experts were asked to review the questionnaires and provide feedback on content relevance and clarity, (2) a pilot test of instrument was administered to 10% of participants similar to those who participated in the study.

7.3. Distribution of Questionnaires

After listing the required information, assignment of suitable scale of measurement, first draft and pre-testing of questionnaire and final draft of the questionnaire, the next step that is distribution of questionnaires in the selected sample of pre-determined population has been facilitated.

After preparing first draft, group review and pilot study, the questionnaires were distributed through direct interview; some were mailed.

These were distributed to TMMOB Harita Ve Kadastro Mühendisleri Odası, TMMOB Gıda Mühendisleri Odası, İnşaat Mühendisleri Odası Ankara Şubesi to get answer for the questionnaires from engineers. Also, these were distributed to Yatırımcı ve Sanayici İş Adamları Derneği, and were sended to Türkiye Turizm Yatırımcıları Derneği.

8. TREATMENT OF DATA

In this chapter, we described how data collected and how we analyzed data. Researchers need to develop analysis plan for data analysis. We searched techniqes of artificial intelligience ,usage area of feasibility report and relationship between feasibility reports and Artificial Intelligence.

We used some hypothesis for example "There is a relationship between preparing feasibility reports and Artificial Intelligence." and "There is a relationship between investing activities and feasibility reports." using data that we collected to find answer for hypotheses.

8.1. DATA ANALYSIS

Data collected through the questionnaires was analyzed using Statistical Package for Social Science (SPSS) and EXCEL. The following statistics was used to analyze the data:

By use of descriptive statistics, frequencies were tabulated and compared to indicate the effect of homework on the students learning.

Independent sample t-test was used to test the hypotheses and analyze the viewpoints of participants from India and Iran regarding the effects of homework on students learning.

9.SUMMARY

The purpose of this research is preparing feasibility report more efficiently with artificial intelligience and we make use of some references and academic thesis. In chapter 3, we wrote about various aspects of research design, sampling methods, data collection and research instruments. We used tests for analyzing better the hypothesis.

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