



Arab American University

Faculty of Graduate Studies

**Utilizing Artificial Intelligence in Strategic Planning and
Foresight Approaches: A Case Study Future of
Development in Palestine under Uncertain Political,
Social, and Economic Circumstances**

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**This thesis was submitted in partial fulfillment of the
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Thesis Approval

Utilizing Artificial Intelligence in Strategic Planning and Foresight Approaches: A Case Study Future of Development in Palestine under Uncertain Political, Social, and Economic Circumstances

By

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This thesis was defended successfully on 03-10-2024 and approved by:

Committee members

Signature

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Declaration

I am the undersigned who submitted the thesis entitled, Utilizing Artificial Intelligence in Strategic Planning and Foresight Approaches: A Case Study Future of Development in Palestine under Uncertain Political, Social, and Economic Circumstances I declare that the work presented in this thesis, either in whole or in part, is my own, and it has not been submitted by others elsewhere for any other degree or qualification, except where explicitly stated through reference or acknowledgment.

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Dedication

I dedicate this humble effort to the purest source of water, which I did not mention in my study, this water is the tears of the families of the martyrs and prisoners, The water of our dignity.

To the one who has been my support and help in times of hardship throughout my life, to the one who paved the way for my studies with his hard work, to the one who honored me with his upbringing and made me happy with his presence, to the man dearest to my heart (My Father).

To the one who gave me her blood and her soul to begin the journey...to the source of love and giving and the one who placed heaven under her feet...to the Lady of Women (My Beloved Mother).

To the parts of my heart that beat outside my body...(Hanan, Hussam, Ahlam, Mohammed).

To the little angel of our family, Bella,

To everyone who taught me a letter and was a good helper (Dear Teachers).

To everyone who supported me, to my friends, colleagues, and those who were with me during my scientific career, With love and gratitude.

The Researcher

Acknowledgment

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Your contributions were the light that guided my path to completing this thesis.

The Researcher

Abstract

The aim of this study is to identify future scenarios of development in Palestine under unstable political, economic, and social conditions. By using foresight techniques to build and prioritize future scenarios and analyze potential and future trends, the study employs artificial intelligence in strategic planning to develop a developmental model that guides efforts and development plans towards beneficial and sustainable directions for the future of Palestine. The significance of this study lies in its being the first in Palestine to operate within an environment of highly unstable indicators, where uncertainty increases significantly day by day. Consequently, the traditional pattern of foresight studies is not present in this study.

This study belongs to the field of future studies with a multi-disciplinary approach based on case study methodology. The researcher used an elite opinion poll tool to answer the study's questions and achieve its objectives. The elite opinion poll was conducted with 32 experts in the fields of politics, economics, sociology, as well as representatives of civil society and governments. Foresight techniques and artificial intelligence were used to analyze the data from the "elite opinion poll. The study utilized various artificial intelligence techniques in several key areas, such as ChatGPT and "AI Futurist by Futures Platform," for data integration and analysis, big data processing, scenario creation, and scenario evaluation.

The study concluded with a set of results, the most notable of which is that political factors are the most important in the living reality in the West Bank, followed by economic factors, and then social factors. Regarding the factors most affecting the living reality, the results

showed that the ‘development plans’ of the Palestinian National Authority, and the Israeli occupation through their control of crossings and clearance funds, were the most influential.

The results indicated that the most influential economic factors in future scenarios were the Palestinian National Authority’s ability to manage and fulfill its financial obligations, and the Israeli occupation's control over clearance funds. As for the social factors most affecting the future of Palestinian society, the results showed that ‘the increase in poverty,’ followed by the factor of migration, are the most influential.

The results also showed that there is a significant state of political, economic, and social instability, making all proposed options open for shaping the future.

Keywords: AI, Strategic Planning, Future Studies, Foresight Techniques.

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Chapter One

Introduction

In this chapter, the background of the research will be presented. It aims to provide the readers with an introduction to the topic being studied. This includes the research problem and justification for conducting the research, research objectives; questions, hypotheses, delimitations, limitations, and additionally an outline of the thesis will be included in this chapter.

1.1Background

Foresight Strategic studies benefit from the strategic planning methods, despite the methodological differences between them. Strategic planning aims to analyze the internal and external environment and identify strengths and weaknesses to achieve predefined strategic objectives. On the other hand, foresight aims to understand the future through techniques that assume we are living in that future.

With the advent of artificial intelligence in various fields of life, including scientific research and foresight studies, AI has facilitated the construction of large datasets and the integration of quantitative and qualitative information, made the task of foresight and understood possible, probable, and preferred future scenarios much more accessible. AI's ability to process and link vast amounts of data has revolutionized how we approach scientific research and strategic foresight.

In Palestine, strategic planning and foresight are crucial due to the complex, challenging, and unstable political, social, and economic environment, which necessitates well-thought-

out plans and the ability to anticipate future scenarios. By utilizing foresight techniques and strategic planning, policymakers can develop proactive strategies, better prepare to navigate uncertainties, address future challenges, mitigate their impacts, and work toward a more stable and prosperous future.

Given the unique context of Palestine, the use of artificial intelligence in strategic planning and foresight can significantly enhance decision-making processes. AI's capabilities in predictive analytics, big data processing, scenario generation, and scenario evaluation—through risk analysis and public opinion analysis—can provide deeper insights, enable proactive planning, improve accuracy in forecasts, and optimize resource allocation. Consequently, AI serves as a powerful tool in strategic planning and foresight studies, helping to develop more effective plans and strategies and better prepare for future challenges amidst unstable political, economic, and social indicators. Thus, the researcher recognized the importance of conducting this study, which aims to identify future development scenarios in Palestine under unstable political, economic, and social conditions. Given the scarcity of studies (to the best of the researcher's knowledge) addressing this aspect, the researcher hopes that the findings and recommendations of this study will contribute to the development of focused research related to the subject matter.

1.2 Research Problem

Palestine is experiencing a state of uncertainty in its social, economic, and political conditions. The significant challenges it faces make comprehensive development and formulation of development plans a complex process. Such planning requires a holistic approach capable of responding to all possible, probable, and preferred scenarios. The rapid

advancement of artificial intelligence (AI) has provided an opportunity to integrate a wealth of data for scenario creation. Additionally, AI allows for assessing and studying the likelihood of each scenario, simplifying scenario analysis, and enabling the formulation of reasonable strategies.

The main challenge in this study lies in harnessing AI capabilities to deal with dynamic political, economic, and social data for building feasible development scenarios and creating a general framework for Palestinian development policies until 2035.

Given the instability of social, economic, and political indicators in Palestine, and the significant influence of external and internal factors on their future behavior, the core challenge lies in identifying the behavior of these indicators. Can artificial intelligence assist in this regard by using foresight methodologies (such as modeling, time series, and others) to predict the future based on the past behavior of these indicators?

1.3 Research Objectives:

The main objective of the research is to identify future scenarios in Palestine under unstable political, economic, and social conditions.

The sub-objectives for this research include:

1. Utilizing future studies techniques: This involves using methods and tools from future studies to understand and analyze potential and future trends in Palestine.
2. Building and weighting future scenarios: This objective entails creating a diverse set of future scenarios that represent various possible developments in politics, economics, and society in Palestine.

3. Using artificial intelligence techniques to build a conceptual model: This objective aims to leverage the capabilities of artificial intelligence to construct a development model based on the most probable scenario. This model will assist in directing efforts and investments towards sustainable and beneficial directions for Palestine's future.

1.4 Research Questions

The main research question for this study is: What is the future of development in Palestine in light of political, economic, and social changes?

1.4.1 The sub-questions include:

1. What are the possible, plausible, and preferred scenarios for development in Palestine?
2. What are the most influential and impacted factors in development?
3. What policies are required for each scenario?
4. How can artificial intelligence be utilized to create and forecast the impact of various scenarios on development in Palestine?

1.5 Hypotheses

The main hypothesis is that the future of development in Palestine is contingent on political factors and their developments, and that it is not possible to build a strong, independent economy without liberation from occupation.

1.5.1 The sub-hypotheses are as follows:

1. The internal Palestinian situation is the most significant factor contributing to instability.
2. Occupation will exert greater control over the Palestinian people's future.
3. External factors will play a significant role in shaping the Palestinian economy and society.

1.6 Significance and Justifications

1.6.1 Significance of the Study

Scientific Significance: This research utilizes innovative tools, harnessing the capabilities of artificial intelligence and integrating various research techniques. It contributes to the advancement of knowledge by exploring new ways of combining strategic planning and foresight studies.

- **Social Significance:** The research addresses a topic of high social importance, namely the future of development in Palestine, within the context of complex political and economic conditions. It seeks to provide insights and potential solutions to the challenges faced in this region, which can have a significant impact on the well-being of the Palestinian population.
- **Political Significance:** Decision-makers can benefit from the scenarios generated by the research when formulating developmental plans and considering alternative strategies, particularly in scenarios with adverse conditions. This research can serve as a valuable tool for policymakers in making informed decisions that address the unique challenges and uncertainties of the Palestinian context.

1.6.2 Justification of the Study

The topic of development under occupation and in the midst of complex political, economic, and social conditions is one of the most pressing issues facing Palestinian policymakers and future planners. Therefore, this research fulfills a critical need for decision-makers, as it will address questions posed within decision-makers.

and civil society institutions regarding the future of development in Palestine under various scenarios and the policies that should be adopted for each scenario.

Furthermore, the research will leverage the capabilities of artificial intelligence in constructing these scenarios and use techniques for weighting and comparing them, drawing from economic, social, and political data. This approach will provide decision-makers with a robust framework for making informed choices and developing strategies that are well-suited to the unique challenges and uncertainties faced in Palestine's context. The novelty of the research comes through the use of future studies techniques (Delphi, cross impact matrix, modeling, and others) and integrating them with the capabilities of artificial intelligence. Future modeling studies are almost rare in Palestinian universities, and most current studies use strategic planning techniques, while this study will use foresight techniques, which are more modern.

1.7 Research Methodology

Approach:

This Study will apply multi-disciplinary research.

Methodology:

Literature Review: The literature relevant to theories and methods of future studies, scenario building, and development in Palestine will be reviewed (secondary sources). This literature will be used to construct the theoretical framework for the study.

Data Collection: Information will be gathered as follows:

- Secondary Information: From relevant literature and previous Palestinian development plans.
- Primary Information: A set of questions will be developed for interviews to build a Delphi framework and employ scenario-building techniques.
- The poll will include:
 - Politicians
 - Development experts
 - Sociology experts
 - Economic experts
 - Civil society and decision-makers

Scenario Building: Data for scenario building (economic, social, political, environmental, and technological data) will be collected, and artificial intelligence will be utilized for data weighting and scenario construction.

Consultation with Expert Panel for Scenario Evaluation.

Formulation Development Models for Each Scenario (Possible, Plausible, Preferred).

Formulation of Policy Matrices for Dealing with Each Scenario.

Modeling techniques will be dealt with by inputting the indicators into a computer program dedicated to this purpose and building models such as time series. Based on this, their behavior will be inferred individually and with mutual influence.

The analysis will also include the current and future behavior of social, economic, and political indicators using modeling and statistical analysis techniques.

1.8 Terminology of study

Artificial intelligence (AI): is a modern field that focuses on developing devices and programs capable of simulating human intelligence. These systems can store data, knowledge, and experiences, analyze them, and use them to make decisions or predict new situations based on their learning capabilities.

Strategic Planning: is the method that assists officials and managers in organizations and companies, especially executive managers, in identifying appropriate mechanisms and procedures that achieve the best results by utilizing the available resources and capabilities in the work environment.

Future Studies: is an analytical strategic science that aims to study and predict future events based on data collection, analysis, and understanding of current trends. It helps identify scenarios and anticipated changes for the future.

Development: is the process of elevating a society and moving it toward a better state by harnessing the capabilities and various resources available to community members, directing their utilization toward improvement.

1.9 Limitations of the Study

1. The lack of information and reliable sources about Palestinian development plans that were formulated or implemented by Palestinian governments in previous years.
2. The absence of comprehensive and final reports on the economic and social damages during the research period due to the ongoing war of extermination on Gaza.
3. Difficulty in accessing certain experts to engage them in opinion surveys is due to the closures imposed by the occupation during the brutal aggression on Gaza Strip. These closures have restricted movement and communication; make it challenging to involve experts in critical discussions and research.

1.10 The Structure of the Thesis

This study is organized into four chapters and they are as the following:

1. Chapter 1: Introduction, this chapter provides readers with an introduction to the study's topic, statement of the problem, rationale for conducting the research, research objectives, questions, hypotheses, scope, design, limitations, and contribution to knowledge.
2. Chapter Two: Literature Review, this chapter reviews relevant literature related to the study's problem, explores the relationship between Artificial Intelligence, Strategic Planning, and Foresight Techniques, and identifies gaps in current research. This paves the way for the study's contributions.
3. Chapter Three: Research Methodology, this chapter discusses the research methodology, including data collection techniques and analysis.

4. Chapter Four: Data Analysis and Discussion, this chapter analyzes data from hypothetical technologies and focuses on using artificial intelligence techniques in strategic planning and foresight methodologies. The results are discussed in the context of literature review.
5. Recommendations: This chapter presenting recommendations.
6. References: This study relied on the APA7 reference guide.
7. Appendices: The appendices included the Opinion Poll Form.

Chapter Two

Literature Review

2.1 Artificial Intelligence ‘A pivotal force for reshaping the future’

In an era where the pace of technological advancement is accelerating, artificial intelligence (AI) emerges as a pivotal force reshaping the global, political, economic, and social landscape. It has not only transformed the way we work and live but also revolutionized our interactions with the world around us. AI has become an integral part of our daily lives, extending its impact beyond technological innovations to encompass political, social, and economic aspects of societies worldwide. By contributing to future planning and foresight, AI empowers leaders and planners to anticipate future challenges and opportunities, enhancing their ability to engage in strategic planning and confidently prepare for what lies ahead.

2.1.1 The political Impact of Artificial Intelligence

Politically, Artificial Intelligence (AI) is considered a powerful tool that enables governments to enhance decision-making and strengthen national security by understanding trends and forecasts. It also contributes to the development of advanced defense systems and enhances intelligence capabilities, thereby increasing a country's ability to protect its borders and citizens. Moreover, AI plays a role in improving international diplomatic relations through trend analysis and supporting diplomats in their tasks. Its impact extends to shaping changes in international politics and global power dynamics. However, responsible use of AI is essential to ensure global security and stability. According to

UNESCO, 193 countries adopted the world's first global agreement on AI ethics in 2021, underscoring its importance and impact on daily life. (Al-Azab, 2022) (Abdulnabi, 2020).

2.1.2 The Social Impact of Artificial Intelligence

Socially, Artificial Intelligence (AI) is considered an effective tool for improving quality of life and contributing to sustainable development and community enhancement. Its ability to analyze vast amounts of data helps understand human behavior, preferences, and societal trends. By driving changes in the nature of work, AI reduces the gap between wages and skills and shapes consumption patterns. Consequently, it enhances decision-making and aids social workers in understanding complex issues. However, it also faces numerous challenges, including bias and ethical concerns. (Goldkind, 2021), (Suzuki, 2024).

2.1.3 Economic Impact of Artificial Intelligence

Economically, artificial intelligence is considered a driver of innovation and development across various sectors. It helps enhance productivity and develop diverse new products and services by improving workers' capabilities and automating tasks, enabling decision-makers to make more informed decisions. According to an analysis conducted by the International Monetary Fund (IMF) titled Artificial Intelligence and the Future of Work (2024).

There is vast potential for artificial intelligence to contribute to global economic activity. The McKinsey Global Institute has examined five broad categories of artificial intelligence: computer vision, natural language processing, virtual assistants, robotic process automation, and advanced machine learning. Companies are likely to adopt these tools to varying degrees. Some may take an opportunistic approach, testing a single technology and applying it to a specific function (a strategy referred to in their model as

"adoption"). Others may be more ambitious, adopting all five technologies and integrating them across the entire organization (referred to as "full or comprehensive absorption"). Between these extremes, many companies will be at different stages of adoption, and the model captures this partial adoption effect as well. By 2030, moderate simulations suggest that approximately 70% of companies might adopt at least one type of AI technology. However, less than half of these companies will fully absorb all five categories. The pace of adoption and full absorption may be relatively swift—at the higher end of what has been observed with other technologies. (The McKinsey Global Institute, 2018).

AI is expected to impact approximately 40% of jobs worldwide, (Georgieva, 2024). Furthermore, Al-Yahya, Secretary-General of the Digital Cooperation Organization, noted that developing countries face significant challenges in digital transformation, primarily the availability of suitable infrastructure and relevant skills. She highlighted that generative AI is projected to contribute \$15 trillion to the global economy by 2030, with 2% of this amount expected to originate from the Middle East, contributing approximately \$320 billion to the region's economy.

She also added that every country faces significant challenges, including the availability of infrastructure, connectivity, cloud computing, skills, regulatory policies, attracting investments, and supporting companies in expanding beyond borders. No single country can address these issues alone, which is why the Digital Cooperation Organization was established as a platform for exchanging business models and practices and collaborating with the private sector. She emphasized that there is a significant and valuable opportunity that the region and developing countries must seize by investing in infrastructure, providing

skills, and building an innovative environment. This would enable these countries to become producers of this technology and create more local content rather than just being consumers, thereby helping achieve sustainable economic growth. At the same time, it is essential to consider the challenges associated with the use of artificial intelligence, such as the risk of widening the technological gap and increasing inequality in income and wealth distribution. This necessitates striking a balance between leveraging AI technologies and mitigating their risks to ensure they benefit humanity. (Ben Qarrab, 2023).

Regarding Palestine and artificial intelligence in the banking sector, the Palestine Monetary Authority has adopted global decisions and recommendations related to integrating AI technologies into the banking and financial sector. Over the past few years, the Authority has worked on implementing new initiatives for digital transformation and developing the banking sector's infrastructure. This effort is part of a long-term vision aimed at achieving financial inclusion and improving banking services for Palestinian citizens. Banks in Palestine face unique challenges related to political and economic factors. Here, AI plays a crucial role in enhancing the banking sector's ability to address these challenges and obstacles, enabling it to improve efficiency and better respond to rapid changes. In this context, adopting AI is a core component of the Palestine Monetary Authority's strategy. Through AI, the Palestinian banking sector can significantly enhance risk management, strengthen cyber security, and protect customer data. (Al-Khatib, 2024).

Although Artificial Intelligence (AI) is considered a crucial element in achieving sustainable development and building a more stable and prosperous future for societies worldwide, it carries numerous ethical and social challenges that must be addressed and

confronted. Privacy concerns arise due to the potential exploitation of AI technologies for emotional and psychological manipulation or even intimidation to influence public opinion and human behavior. Various methods, including emotional analysis, personalization, and information manipulation, contribute to these concerns.

According to global news agencies, this year (2024) is considered the largest election year in history. Approximately one billion voters will head to the polls for elections in India, South Africa, Russia, the European Union parliamentary elections and the United States. One of the significant concerns related to artificial intelligence, given the absence of regulation in social media companies, is the use of AI techniques to flood the region with what has been described as a ‘tsunami’ of misleading information.

Despite the negative implications, it is not impossible for artificial intelligence (AI) technologies to produce fake images, audio clips, and even highly realistic videos. This has already occurred. For instance, the National Committee of the Republican Party in the United States released a fabricated advertisement created using AI in April. The ad featured images of President Joe Biden alongside fake images of an American dystopia that are expected to be perpetuated if he is re-elected. Similarly, In Arizona, AI-generated misinformation was used to deceive election officials during a two-day simulation preparing them for a potential onslaught of misleading information this year.

The use of AI in creating deceptive content raises significant concerns, especially in the absence of proper oversight within social media companies. As we navigate this landscape, it becomes crucial to strike a balance between leveraging AI’s capabilities and mitigating

risks. Ensuring transparency, accountability, and ethical guidelines will be essential to harnessing the potential benefits of AI while safeguarding against its misuse. (UNESCO, 2021) ‘ (Ajne.net, 2024).

In this context, future studies and strategic planning based on artificial intelligence are fundamental pillars for constructing sustainable and thriving societies. These societies possess the ability to adapt to rapid changes and confidently face upcoming challenges. The potential impact of AI extends to significant transformations in political, economic, and social patterns. Such comprehensive planning and foresight studies are essential for addressing uncertainty and complexity in development. (Awad, 2022) (Buhlaiqa, 2023).

❖ Abu Nimah (2023) indicated this through the following points:

- **Enhancing Strategic Decisions:**The ability of artificial intelligence to analyze big data assists decision-makers and organizations in making informed and precise decisions.
- **Foreseeing the Future:** Artificial Intelligence enhances future insights with greater clarity and accuracy.
- **The Impact on Politics and Society:** The ability of artificial intelligence to bring about changes in the global balance of power and influence the interactions between nations can lead to a transformation of state structures and functions.
- **The Impact on the Democratic Model:** Artificial intelligence can increase citizen empowerment and strengthen the foundations of democracy by enhancing transparency and active participation. (Al-Azab, 2022).

- The manipulation of human behavior: Numerous studies have shown that artificial intelligence has the ability to influence human behavior and decision-making, raising ethical concerns that require careful examination of its impact.
- The era of artificial politics: Applications and techniques of artificial intelligence, such as ‘chat bots’, can interact with the public and voters, targeting specific population groups, thereby enhancing political campaigns.

Here, the importance of this study for the future development in Palestine becomes evident, given the complex political, economic, and social conditions. Decision-makers, policymakers, and future planners in Palestine greatly need this study, utilizing artificial intelligence techniques for strategic planning and foresight.

2.2Theoretical backgroundArtificial Intelligence

2.2.1 Introduction

Artificial Intelligence (AI) is shaping the features of a new world driven by technological advancements, which have become a benchmark for evaluating societies based on their utilization of technological resources and AI. AI has become a fundamental source of growth and development for contemporary societies, effectively facilitating life in various fields. It is considered a scientific revolution that has opened new horizons and brought unprecedented changes in performing tasks and innovating modern means to accelerate achievement. Its applications are diverse across military, economic, educational, industrial, technological, and service sectors. This signifies a radical transformation in the lives of individuals and institutions alike in the coming decades, aiding in strategic planning

processes that rely on predicting future challenges and opportunities and preparing plans to address them. (Al-Astal, Mahmoud Zakaria Saher, 2020).

This section of the chapter addresses the concept of artificial intelligence, its origins and objectives, as well as its importance and benefits. It also covers the stages of artificial intelligence development, its characteristics, and its applications in strategic planning.

2.2.2 Origins and Development of the Concept of Artificial Intelligence

Artificial intelligence reflects the evolution of philosophical traditions and theories in management and learning over more than a two thousand years. These theories have contributed to the development of AI models, alongside advancements in mathematics over the past four hundred years. The development of AI has been accompanied by some controversies regarding its origins. Some suggest its roots date back to ancient times, appearing in myths and legends about artificial beings with extraordinary intelligence. Others claim its origins lie with classical Greek philosophers, linking it to mathematics in three areas: logic, computing, and probability theory, as well as algebra, attributed to the Arab mathematician Muhammad al-Khwarizmi (Yaseen, 2012).

However, some agree that the term "artificial intelligence" began in 1950 when Alan Turing introduced the "Turing Test," a method for evaluating a computer's intelligence based on its ability to mimic human thought (Boden, 1988). The concept is also attributed to John McCarthy, who defined it as "the science and engineering of making intelligent machines" during the Dartmouth Conference in 1956, considered the birthplace of AI. Since the mid-1950s, the term "artificial intelligence" has spread, with applications in natural language processing, speech recognition, and robotics. The field has seen rapid

advancements in technology, medicine, economics, industry, and services, reflecting the continuous evolution of AI and its diverse applications that will continue to develop to meet human needs, driving us to keep pace with knowledge and technological advancements in various fields (Al-Louzi, 2012; Aqel, 2020).

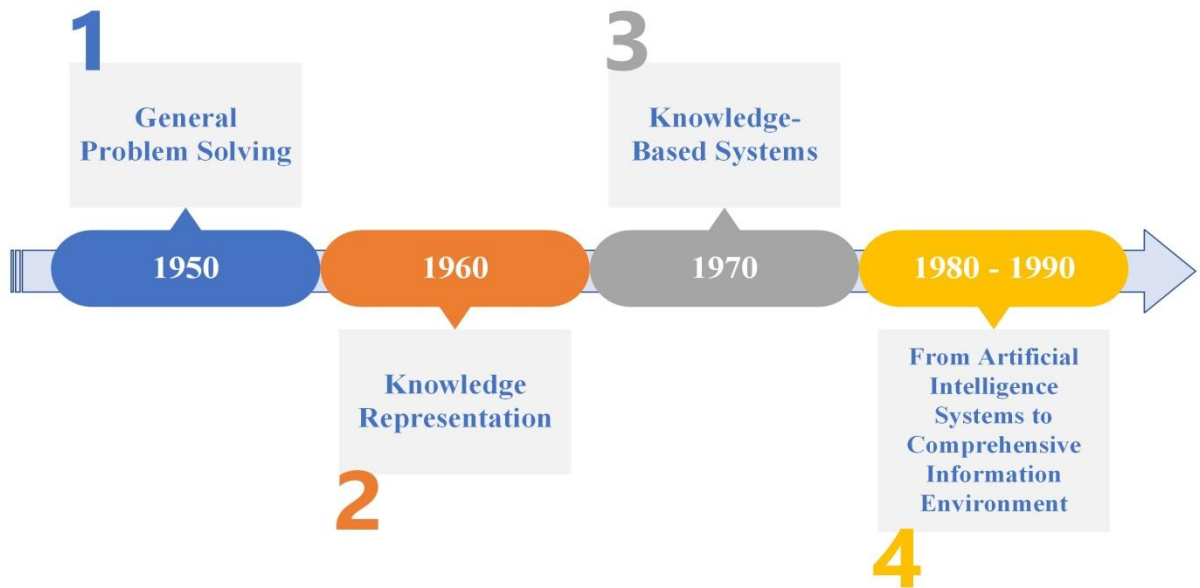


Figure 1: The evolution of the concept of artificial intelligence.

(Aqel, 2020).

Kazem (2012) divides the timeline of artificial intelligence development into three periods or stages, as shown in Figure (1):

1. The First Stage (1950-1963): Initiated by Shannon's research on chess, this stage ended with the contributions of Feigenbaum and Feldman. It was characterized by the use of computers to solve puzzles and games.

2. The Second Stage (Mid-1960s to Mid-1970s): Known as the "romantic period," it included significant scientific efforts from various scholars like Minsky, who developed frames for representing information, and Winograd, who created a system for understanding English sentences in stories and conversations. Other notable contributions came from Anuston and Brown, who summarized a book on advanced words at the Massachusetts Institute of Technology, covering natural language processing, computer vision, robotics, and symbolic processing.
3. The Third Stage (Mid-1970s to present): This "modern period" saw the emergence of various technologies addressing numerous applications, significantly transferring human intelligence into computer programs. It is considered the golden age of AI, marked by the appearance of numerous modern AI systems. The core of this science and its technologies expanded to include symbolic modeling, list processing mechanisms, and various programs and techniques interacting with scientific fields.

2.2.3 The Concept of Artificial Intelligence

Artificial intelligence refers to advanced computer applications that operate autonomously using technologies capable of handling unexpected situations, thinking, and perceiving in ways similar to human capabilities (Al-Khouli, 2017).

Concept of Artificial Intelligence (AI):

AI refers to the approach of emulating the capabilities and functions of the human mind. It is defined as a field of computer science dedicated to solving cognitive problems associated with human intelligence. AI consists of a set of interconnected tools and techniques that

attempt to mimic and understand the capabilities of the human mind and how it operates. These tools enable machines to perform tasks that were traditionally believed to require human intelligence.

In essence, AI systems simulate human cognitive processes such as thinking, understanding meaning, and learning from past experiences. This applies to digital applications that solve mathematical equations, provide proofs, recognize voices, play intellectual games like chess, and perform searches on the internet. Recently, AI has been described as a system capable of perceiving its environment and taking appropriate actions to maximize its chances of successfully achieving its objectives, as well as analyzing and interpreting data. This development highlights the strong connection between AI and data management, which requires vast amounts of data for analysis and digital processing. Therefore, AI is considered a science defined by its goal of enabling machines to perform tasks that require intelligence (Yaseen, 2012).

Carlos (2018) states that AI has become a highly popular and widely used topic in academic fields today due to the rapid advancement in technology and economic incentives created by companies. This trend has been reinforced recently with the advent of big data.

According to Qamura and Krosh (2018), AI has become a widely recognized term used in all fields of humanities and scientific technologies. In our current era, it is common to purchase modern devices equipped with intelligent software in various forms and interact

with them. A program is considered intelligent when it makes decisions that were not pre-programmed, exhibiting behavior that adapts to its condition and environment over time.

Mousa and Habib (2019) define AI as the ability of computers and digital machines to perform tasks that resemble and mimic human capabilities, specifically cognitive abilities such as thinking and learning from past experiences.

Zuhur (2019) indicates that AI consists of practical and theoretical methods, applications, and algorithms that perform various tasks on behalf of humans, whether partially or entirely, such as decision-making processes, as well as the ability to infer, predict, or adapt.

Bakr (2019) defines AI as the ability to develop technological and information systems that rely on computers and machines to perform tasks that require human intelligence and derive logical conclusions.

Ocana-Fernandez, Valenzuela-Fernandez, and Garro (2019) define artificial intelligence as an aspect of computer science that aims to provide a diverse range of methods, techniques, and tools to create models and solutions for problems by simulating individual behavior.

In recent years, artificial intelligence has brought about significant technological advancements that have the potential to alter various aspects of human life. These technological advancements have also made their way into the field of higher education (Hinojo-Lucena et al., 2019). Artificial intelligence can connect educational domains in the neural network, distinguishing, classifying, and elucidating them. This evolutionary development is commonly used in knowledge building (Jena, 2018).

Based on the aforementioned definitions, the researcher defines artificial intelligence as follows:

Artificial intelligence is a modern science that focuses on developing devices and programs capable of simulating the human mind, storing data, knowledge, and expertise, analyzing them, and using them for decision-making or predicting new data and situations based on their learning capabilities.

2.2.4 The Importance of Artificial Intelligence in Decision-Making

Artificial intelligence plays a crucial role in decision-making, as intelligent systems can analyze large datasets and generate conclusions and recommendations quickly and accurately. This helps organizations and institutions make informed decisions based on data and derived analyses, enhancing efficiency and effectiveness in implementing strategies and plans.

2.2.4.1 Utilizing Artificial Intelligence in Strategic Planning and Foresight for Palestine's Future Development

Regarding Palestine, we can utilize artificial intelligence and its tools to analyze data related to the economy, development, environment, and society, deriving results and recommendations that can contribute to achieving sustainable development for the country. AI and its tools can also be used to analyze economic, social, and environmental trends and forecast the future based on these analyses. This can support informed strategic decision-making to advance the country's future development, especially in a context like Palestine, where political, economic, and social indicators are in constant and complex flux, particularly under the current circumstances of the genocidal war being waged by the Israeli occupation on Gaza and the West Bank.

The matter is complex when it comes to the future of development in Palestine, especially since political, economic, and social indicators are continuously and significantly changing.

2.2.5 Types of Artificial Intelligence

There are two types of artificial intelligence: weak AI and strong AI. Weak AI focuses on specific and narrow tasks, such as self-driving cars. On the other hand, strong AI is capable of performing most of the cognitive tasks possessed by humans and can be applied to various problems (Ma &Siau, 2018).

However, Saad (2020) and Yadav et al. (2024) classified artificial intelligence into three types:

1. Narrow Artificial Intelligence (ANI):

Systems capable of performing tasks independently but are limited to specific tasks designed for them. This category includes contemporary AI applications, even those with deep learning capabilities.

2. General Artificial Intelligence (AGI):

Mimics human capabilities for understanding, perception, learning, and working like a human. Systems in this category have the ability to develop various capabilities and make connections and generalizations across multiple domains.

3. Super Artificial Intelligence (ASI):

Distinguished by its superior memory, data processing speed, statistical analysis, interpretation, and interconnection capabilities, enabling it to make decisions. Advancements in ASI may lead to technological singularity, surpassing human abilities in guidance and control.

2.2.6 Objectives of Artificial Intelligence

Artificial intelligence aims to understand and comprehend the nature of the human mind through computer programs that simulate intelligent human behavior. These programs perform various tasks in place of humans, either partially or completely, such as decision-making processes or solving specific problems based on multiple programmed inference operations.

The goals of artificial intelligence can be summarized into two primary points according to Saadallah and Shtouh (2019):

1. **Information Processing:** Machines' ability to process information in a manner that simulates human problem-solving behavior, known as parallel processing, allows executing multiple tasks simultaneously, closely resembling human problem-solving methods.
2. **Understanding Human Intelligence:** Attempts to understand human intelligence to simulate it. This involves attempting to replicate the interconnected functions of the human nervous system and brain for understanding, problem-solving, and decision-making.

Additionally, Al-Louzi (2012) outlined three goals of artificial intelligence:

1. Understanding the nature of intelligence.
2. Developing devices to make them smarter and more useful.
3. Enhancing communication and interaction between humans and machines, as well as between machines themselves.
4. Objectives of Artificial Intelligence.

Numerous researchers have outlined the objectives of artificial intelligence as follows:

1. Understanding the nature of human intelligence to develop computer programs capable of simulating human behavior (Bonieh, 1993).
2. Programming and enhancing computers to solve problems based on learning from previous experiences (Hammad, 1996).
3. Designing intelligent systems and programs that exhibit human-like intelligence by using non-algorithmic symbolic processing to solve problems (Bassioni, 1998).
4. Exploring higher-level cognitive processes occurring within the human mind (Alziyat, 1999).
5. Making computers and smart devices more user-friendly and capable of problem-solving, facilitating effective and cost-efficient learning and training processes (Salem, 2001).

2.2.7 General Characteristics of Artificial Intelligence

Artificial intelligence possesses several general characteristics:

- Precise problem-solving abilities, even with incomplete information.
- Thinking and perception capabilities.
- Acquisition and application of knowledge.
- Understanding and learning from past experiences.
- Prompt responsiveness to new situations and circumstances.
- Ability to handle complex and challenging conditions.
- Provision of information to aid decision-making.
- Visualization and creativity, understanding visual concepts.

2.2.8 Importance of Artificial Intelligence

The significance of artificial intelligence, as noted by Salaheddin (2014), lies in its vital role in advancing various aspects of human life by developing computer systems with capabilities and efficiency that mimic human abilities and experience. Its applications have become indispensable in daily life, enabling cultural and technological communication worldwide.

Meanwhile, Mahmoud (2020) emphasizes the importance of artificial intelligence in:

1. Preserving and transferring human knowledge and experience to machines and computer devices.
2. Using natural language as an interaction method with machines, making it accessible to all members of society.
3. Utilizing it in critical areas such as disease diagnosis, interactive education, and military applications.
4. Employing it in hazardous and laborious tasks.
5. Alleviating psychological pressures on humans.
6. Handling tasks requiring significant mental effort and concentration.
7. Advancing scientific and cognitive development in various fields, fostering scientific and exploratory research.
8. Simulating human intelligence and cognitive abilities.

2.2.9 Application of Artificial Intelligence in Strategic Planning

Artificial intelligence (AI) has become an indispensable part of the world of organizations striving to achieve their desired future. Distinguished organizations must remove constraints and break the traditional rules followed in strategic planning. They should incorporate AI into strategic planning and performance measurement. It has become imperative for organizational leaders in our present time to embrace AI and strategic planning as essential factors for growth and development in our world today. This enhances the contribution to clearer and more accurate future forecasting. AI is characterized by capabilities that facilitate strategic development and enhance the competitive position of institutions. The exploitation of these features by institutions fosters competency creation and necessary improvements, especially in strategic planning concerning the precise formulation and delineation of future directions to ensure the achievement of desired outcomes.

The importance of applying AI is highlighted when making strategic decisions for organizations and the subsequent positive or negative effects of these decisions. This is based on the understanding provided by AI of the reasons for the presented expectations and linking them to the conclusions it provides based on information. The application of AI in strategic planning is not limited to a specific institution; rather, all institutions, regardless of their classification and field of work, need to adopt this approach to benefit from the vast capabilities offered by AI tools in all stages of strategic planning. The integration between artificial intelligence and strategic planning is expected to address and solve many problems. Moreover, it will save human effort and time, yielding better results for them. (Ghazi, 2023).

2.2.10 Advantages of Applying Artificial Intelligence in Strategic Planning:

1. AI technologies can be utilized to define an organization's vision and overall direction by linking all relevant elements and axes involved in formulating the vision, such as aligning it with global trends like the United Nations' Sustainable Development Goals, national development plans, and general orientations.
2. AI technologies contribute to providing mechanisms for strategic planning across different phases, particularly in diagnosing the current situation and conducting strategic analyses such as SWOT and PESTEL. This leads to time savings, reduced costs, and increased analytical accuracy.
3. Strategic planning processes can be automated using AI-powered systems, enabling continuous operation around the clock without human intervention.
4. The application of AI in strategic planning allows for learning from past experiences and practical applications to improve strategic plans and their outcomes. This enables team managers to leverage previous mistakes and successes to better guide the system and retrieve accurate and effective information.
5. AI facilitates the immediate retrieval and analysis of big data to derive strategic conclusions effortlessly. This capability ensures swift responses to events related to strategic performance, especially in companies whose performance is influenced by market developments and competitors' practices.
6. AI technologies enable brainstorming, particularly in the initial stages of strategic planning. This leads to the generation of multiple alternatives, decisions, and strategic directions.

7. AI provides the ability to monitor, implement, and assess the effectiveness of strategic performance continuously. It helps identify performance deviations, address and improve them, and ensure the achievement of strategic performance indicators, thereby assisting organizations in ensuring business sustainability.

2.2.11 Challenges Organizations might face when using AI in strategic planning:

- Data Quality and Availability:

Artificial intelligence relies heavily on high-quality, comprehensive data. Any lack of accurate, up-to-date, or well-organized data can lead to unreliable analysis and weak results. Therefore, ensuring data accuracy and managing databases across the organization is critical. (Mission met), (Deloitte United States).

- Legal, Ethical Challenges, and Bias:

AI systems can unintentionally perpetuate or amplify existing biases in the data used for training. This highlights the need for strong frameworks within organizations to ensure the ethical use of AI, mitigate bias in decision-making, and comply with regulations and laws. (Deloitte United States).

- Integration with Human Insight:

While AI excels at pattern recognition and big data analysis, it lacks human intuition and contextual understanding. Effective strategic planning still requires human judgment, creativity, and ethical considerations. . (Mission met).

- Resistance to Change:

Implementing AI often requires significant changes in organizational culture and processes, which may face resistance from teams due to a lack of understanding or fear of job loss. (Mission met).

- Cost and Complexity:

Building and maintaining AI systems for strategic planning can consume considerable resources, including high costs, skilled personnel, and ongoing updates to adapt to rapidly evolving needs. (Mission met)

- Privacy and Cyber security Risks:

Leveraging large datasets for AI raises significant concerns about data privacy and cyber security. Organizations must ensure compliance with regulations and protect sensitive information. (World Economic Forum).

2.2.11.1 Barriers to Artificial Intelligence: The main ones are as follows:

1. Data: The phenomenon of data secrecy is widespread in various institutions, both government and private, under the term "confidentiality." In order for AI systems to function effectively, they need to be trained on data to learn how to perform tasks. Without good and relevant training data, companies will face significant difficulty in relying on these systems. Additionally, they may be forced to share this data with other companies, which most companies are reluctant to do.

Furthermore, when data is input into the systems, there is a possibility of human bias. As a result, human bias exists in AI systems due to the data and algorithms used in their training, which inevitably contain some level of bias.

2. High Costs: Working in this field requires significant resources, from manufacturing the machines to programming and repairing them.
3. Lack of Emotion and Feelings: All human concepts, including conscience, compassion, and collective spirit, will disappear. In other words, machines can perform many tasks without any connection to humans in any form. The problem here lies in the fact that artificial intelligence lacks emotional intelligence, as it cannot understand or classify human emotions or mindsets into any of its data points or profiles.

2.2.12 The use of AI by companies in practice:

There are many institutions around the world that have successfully integrated Artificial Intelligence (AI) into their strategic plans to enhance efficiency and innovation. Examples exist of how organizations have incorporated AI technologies into their operational and strategic processes: (Forbes, 2019).

❖ Amazon

Industry: E-commerce and cloud services

Application: Amazon leverages AI to analyze big data and improve customer experiences through its Amazon Recommendations Engine. It also employs AI in inventory management and optimizes delivery operations using robots and drones.

❖ General Electric (GE)

Industry: Industry and manufacturing

Application: GE developed the Predix platform, an AI-based solution for analyzing Industrial Internet of Things (IIoT) data. The platform helps companies enhance operational efficiency, reduce unexpected downtime, and improve predictive maintenance.

❖ Google

Industry: Technology

Application: Google utilizes AI to enhance search engines, machine translation (Google Translate), and image analysis (Google Photos). It also incorporates AI into its strategic plans to expand generative AI technologies like ChatGPT and Google Bard.

❖ Netflix

Industry: Entertainment and digital streaming

Application: Netflix relies on AI algorithms to provide personalized recommendations for movies and shows based on viewer preferences. It also uses AI to analyze viewer data and make informed production decisions.

❖ Open AI

Industry: AI development

Application: OpenAI has developed applications such as ChatGPT and DALL·E, which are used in education, data analysis, and creative content generation

❖ Microsoft

Industry: Technology

Application: Microsoft integrates AI into its products, such as Azure AI and Microsoft 365, to boost productivity. It has also invested in OpenAI to support the development of generative AI applications.

❖ Healthcare Institutions like Mayo Clinic

Industry: Healthcare

Application: Mayo Clinic uses AI to analyze patient data and develop personalized treatments, including leveraging algorithms for early cancer detection and advanced imaging analysis.

2.3 Strategic Planning

2.3.1 Introduction:

Given the increasing global changes, which have necessitated the adoption of a strategic approach by organizations across all sectors, there is now a unique strategy for each field, resulting in a specific strategy for each institution. Strategic planning has become one of the modern concepts posing a set of challenges, particularly for developing countries. The concept of strategic planning has undergone several historical and intellectual stages to become one of the most important core concepts in evaluating and developing organizations worldwide. Other concepts associated with strategic planning include strategy, strategic plan, and short, medium, and long-term planning. Strategic planning represents a modern form of planning within organizations, leading to changes in how institutions formulate and implement their strategies. Strategic management has become a key tool for organizations to learn and develop strategies, facilitating an effective response to global changes.

Strategic planning aims to construct and adapt a strategy, with the purpose of establishing effective mechanisms capable of utilizing available resources to meet the diverse challenges and accomplish the organization's goals. This involves assessing the strategic needs of the organization in terms of the specified tasks that need to be undertaken, requiring an examination of the workload or future tasks at each administrative level and

department within the organization. Therefore, organizations select appropriate strategies that reflect their mission and goals in the best possible way.

2.3.2 Strategic Planning:

The Concept of Strategy: There is significant importance in grounding strategic planning, as it encompasses all aspects of life. Humans require proper and accurate planning for all aspects of their lives, just as organizations need proper and accurate planning to achieve their desired goals. Similarly, on a governmental level, good planning is required. The importance of grounding in strategic planning is evident in achieving comprehensive effective reform in all aspects of life, as well as achieving development, change, and goals.

The term "strategy" is derived from the Greek language, derived from the word "strategos" (Strategos), and was commonly used in the military field because it refers to the art of leadership, troop movement, deployment, and distribution of military supplies, as well as the ability to mobilize military forces to confront enemy movements and exploit the weaknesses of enemies. With the increasing scientific developments and changes, the use of the term "strategy" is no longer confined to the military field alone but has become used in all scientific fields such as politics, management, economics, and others.

After the use of strategy in various fields, it has been defined as a set of influential and important decisions made by the organization to maximize its benefits from the available opportunities in its surrounding environment and to avoid the external threats and challenges imposed on it.

2.3.3 Planning:

Planning is the act of envisioning the future and preparing appropriate measures by defining the desired actions to be executed by a specific individual within a specified

timeframe, while also indicating the relevant costs within a certain environment and circumstances. (Abdelaziz, 2021). Moreover, Maharmeh (2020) emphasizes that planning is based on several principles, including articulating and defining objectives, accurate forecasting, employee involvement in the planning process, selecting suitable employees for planning, not setting unrealistic expectations, flexibility and realism of plans, and their suitability for the environment.

Additionally, Abu Suwar (2019) elucidates that planning relies on three principles:

1. Predicting and anticipating future actions that can be undertaken, along with estimating the cost and specifying the timeline for their execution.
2. Allocation of Sources, meaning the identification of individuals who will perform the tasks according to a specified schedule.
3. Clarifying how the tasks will be performed to achieve the desired goals.

Hence, it can be said that the planning process is fundamental to any endeavor, regardless of its nature or size. Human beings cannot undertake any task without prior planning, as planning is closely related to human beings. Planning is a matter that has evolved with human development, becoming a science with its own principles and methodologies.

2.3.4 Strategic Planning: The origins of strategic planning date back to the 1950s, but the growth of basic planning occurred in the 1960s and 1970s when major companies and governmental institutions faced problems in managing their various departments and units. Strategic planning demonstrated its effectiveness in surpassing the idea of committing to a one-year budgetary planning cycle. Therefore, the focus shifted to implementing and formulating these strategies, and by the early 1990s, strategic planning played a crucial role

in the progress and success of organizations. The concept of strong and successful management became associated with its ability to think strategically, make appropriate decisions, and motivate individuals to work in a manner that enhances their performance (Al Kasr, 2020).

Strategic planning is a methodical process aimed at achieving a clear vision of the future of something, translating it into goals, and converting it into objectives through a series of steps (Salama, 2019). It is also defined as setting general goals for the work environment, especially those that require time to produce results, and then determining the appropriate actions to execute them (Hasbullah, 2018). Additionally, strategic planning is the method that helps managers and executives in organizations and companies, particularly in determining the appropriate mechanisms and procedures that achieve the best results by utilizing available resources and capabilities in the work environment (Sail, 2017).

Furthermore, Al Bana et al. (2016) view strategic planning as a mental process of analyzing the future position of the institution based on the emerging variables in its internal and external environment. It is a process that does not come from void but begins with identifying the institution's mission, followed by a strategic analysis of the environment, then goal setting, and selection of appropriate strategies to achieve them. Some researchers argue that strategic planning lies in its ability to shape and guide the future of organizations and reduce the chances of failure (Al Shobaki, 2016). Others view it as a planning process that occurs at all levels of the organization, leading to the development of organization strategies based on analysis of internal and external environmental factors (Globocnik,

Faullant, &Parastuty, 2020). Moreover, Al Fiqhi (2017: 139) states that strategic planning is a working method based on detailed analysis of the organization's environment (internal and external) to identify strengths, weaknesses, opportunities, and threats, and develop the organization's goals and strategies to ensure its survival and continuity.

Zaidan (2019) defines strategic planning as an organizational process whereby priorities that achieve the organization's goals are determined, guiding it in utilizing its resources and responding to its surrounding environment. Gaddami and Sultan (2021) regard strategic planning as a systematic managerial tool concerned with the future, specialized in identifying the organization's long-term general goals, thereby defining its strategies through making appropriate decisions in utilizing its resources in response to modern changes in both its internal and external environment.

Based on the above, the researcher defines strategic planning procedurally as:

The way that helps officials and managers in organizations and companies, especially executives, to identify the appropriate mechanisms and procedures that achieve the best results through the use of available resources in the work environment.

2.3.5 The Importance of Strategic Planning:

Organizations that rely on strategic planning to achieve their goals benefit in numerous ways compared to those that lack long-term strategic planning in goal setting. Strategic planning contributes to translating written steps into actual, actionable steps that are implementable and measurable within a specified timeframe. It also outlines the general direction the organization is taking, fosters innovation among employees to adhere to the

set plan, achieve desired goals, and increase the organization's market share (Abdelaal&Alharahsheh, 2021).

Some of these advantages, as highlighted by Hassan (2020), include positive interaction with the surrounding variables of the organization, whether in the internal or external environment. Strategic planning leads to increased utilization of available resources, identification of important issues, and elimination of mental dispersion through clear planning. It also enables predicting and anticipating the future to monitor threats and problems, empowering managers to know future opportunities and improve the situation through good thinking and planning.

Furthermore, strategic planning helps achieve a clear vision of the future, aiding in making appropriate decisions based on the analysis and study of all data and facts. It builds possible and improbable scenarios to ensure the organization's quick adaptation to changes, evaluates the organization's capabilities to help it win potential encounters, and aligns its strengths and weaknesses to improve its outputs and ensure quality (Albrechts et al., 2016).

Given the challenges and risks surrounding the work environment and the lack of clarity in the future vision, planning becomes significantly important in achieving the organization's goals. It seeks continuity and securing its success based on scientific principles, away from guesswork. Therefore, planning reduces wasted time in attempts that may succeed or fail, leading the organization to benefit from the advantages of strategic planning (Albrechts et al., 2016).

The importance of strategic planning lies in determining and formulating the central and strategic issues for organizations, serving as the basis for raising awareness levels about changes in their external environment, directing their administrative functions and

operations. It also assists organizations in managing various factors and conditions affecting performance and optimizing available resources (Omar, 2019).

Strategic planning has become widely common in various organizations and is urgently needed for organizations to develop their performance and gain a competitive position. Organizations that follow strategic plans and seek to develop their performance in the long run distinguish themselves and excel over other organizations, ensuring their survival within the competition, as evidenced by experiments conducted on strategic planning (Ayasra&Alkubaisi, 2018).

Moreover, strategic planning aids in reducing financial and human burdens by optimally utilizing human and financial resources (Al Gouthi, 2017). Thus, both general planning and strategic planning should prioritize the organization's agendas, whether profit-oriented, non-profit, in the production or service sectors, or public or private organizations. All of them require strategic planning to achieve institutional excellence (Marzouk, 2020).

In conclusion, strategic planning is one of the important administrative functions as it represents the fundamental basis upon which functions rely. Its focus on studying the variables occurring in strategic capabilities and tasks contributes to developing a clear concept about the organization, making it possible to draw up plans and programs that lead organizations to their goals. (Tarifi, 2021).

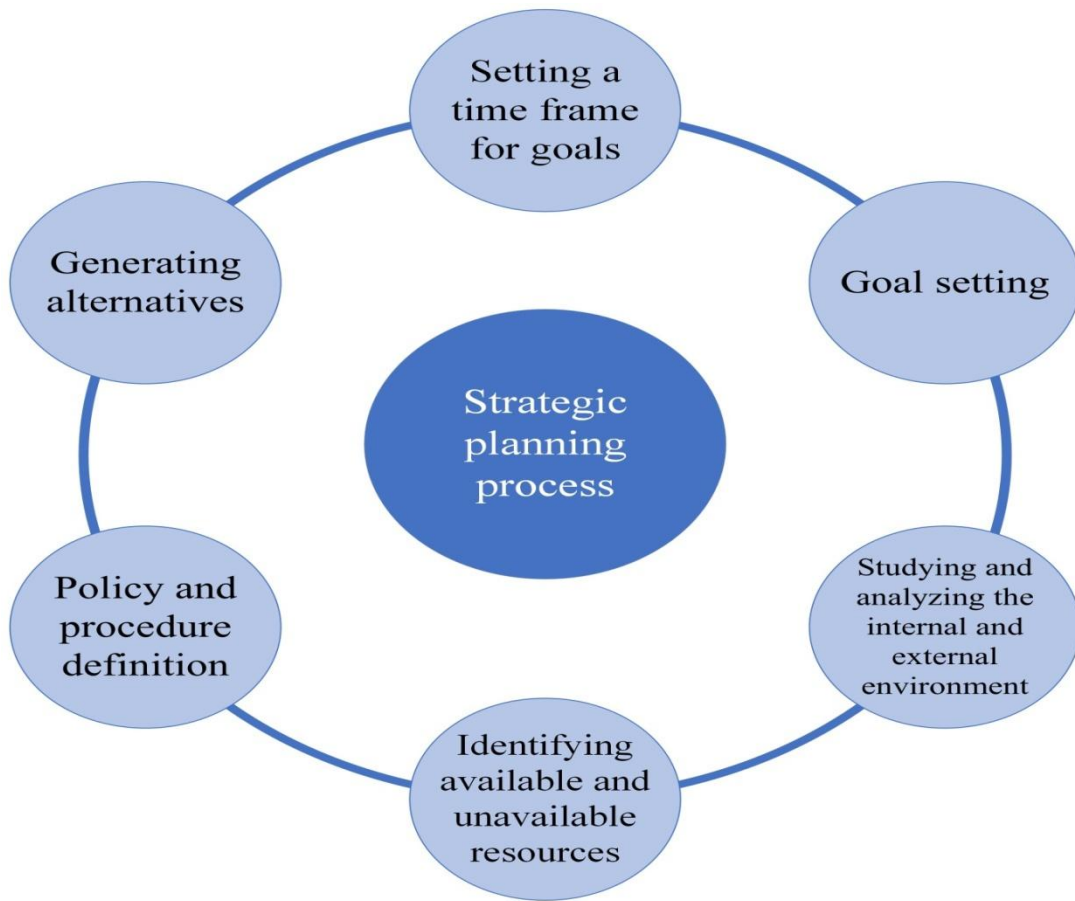


Figure 2: Strategic Planning Process (Al-Sairi, 2013).

Through Figure (2), we highlight the importance of strategic planning, where we can understand it as a deliberate approach that uses a practical methodology to link specific objectives—whether short-term, medium-term, or long-term—with the methods used to achieve them. It clarifies the path that determines policies and decisions, outlines how to implement them, and attempts to anticipate and manage future developments through well-defined and studied procedures that connect "The Plan/Possibilities/Means/Objectives" as shown in Figure (3):



Figure 3: Strategic Planning Process (Al-Sairi, 2013).

Based on the information provided, the researcher concludes that strategic planning is an essential managerial function because it serves as the fundamental framework upon which other functions rely. By focusing on studying the variables affecting capabilities and strategic tasks, strategic planning helps develop a clear understanding of the organization. Consequently, it becomes possible to formulate and shape plans and programs that guide organizations toward their objectives.

2.3.6 Characteristics of Strategic Planning:

The characteristics of strategic planning are diverse and particularly significant in the era of the rapid and growing digital revolution that is sweeping the world. These characteristics, as outlined by Najah & Heba (2022), include:

- **Visionary:** The organization possesses a forward-looking vision that enables it to develop its plans, programs, and activities based on feedback from expected technological changes in the coming years.
- **Comprehensive:** It involves a comprehensive process that defines the organization's programs and various areas directed towards market needs, customer requirements, and creating a competitive advantage to achieve organizational goals.
- **Operational:** It is an integrated process that identifies the procedures and policies that help in designing and developing future plans that the organization aims to implement in the future, considering surrounding variables.

- **Future-oriented Decision Making:** Strategic planning supports both short-term and long-term decision-making processes for the organization's management based on future strategies.
- **Flexibility:** Strategic plans should be flexible to adapt to the continuous changes and variables surrounding the organization.
- **Uncertainty:** Limited available information for the organization and unclear future or the ability to predict it can lead to confusion in managerial levels within the organization and the inability to make correct decisions.
- **Structured:** It is an institutional system consisting of a set of rules, procedures, and policies that organizations establish to manage work and supervise employees to achieve their goals.

Additionally, according to Fadila (2016), one of the characteristics of strategic planning is the comprehensive analysis of the organization's competitive position, identifying strengths, weaknesses, current and expected opportunities, and challenges, fostering constructive interaction and dialogue between different levels of workers within the organization. Similarly, Albaroni (2015) emphasizes that planning is comprehensive and integrated, leading to interaction between management levels and characterized by flexibility, fostering interaction between the planning and execution processes.

2.3.7 Stages of Strategic Planning:

When preparing a strategic plan, it must follow specific steps, as it is an accumulative plan with sequentially ordered steps that must be implemented accurately. The stages of strategic planning, as indicated by Mustafa (2015) and Abdul Qadir (2021), include:

- Vision: It represents the organization's ability to obtain the desired information quickly and expresses the organization's identity, personality, and directions.
- Mission: It is a covenant that clarifies the organization's objectives and purposes.
- Strategic Analysis: An important stage in planning where the internal and external environment is analyzed to identify the available opportunities and potential challenges.
- Agreement on Priorities: In this stage, the future direction of the organization is determined, long and short-term objectives and goals are formulated for the organization, policies, and strategies are outlined through decision-making techniques and group discussions that achieve the organization's aspirations and individual goals.
- Strategy Implementation: A critical stage where the organization's vision and mission, represented by goals and objectives, are translated into practical reality. The implementation phase consists of a series of interconnected activities interspersed with the strategy to be implemented.
- Monitoring and Evaluation: It is the stage in which the current management is evaluated, ensuring that the executive measures are consistent with the vision and mission of the work. By monitoring and controlling the strategies implemented to evaluate their effectiveness and their ability to improve future work, achieving the desired goals and results.

Strategic planning is a systematic process based on scientific principles that goes through several procedural stages to prepare a strategic document scientifically and

technically, as elucidated by Nusair&Osaman (2016), Al-Tarawneh (2023), and Jawad (2010).

- **Environmental Analysis:** An organization's environment consists of two main components: the internal environment and the external environment. Therefore, organizations need to address both of these environments and understand their critical characteristics.

- **Internal Environment Analysis:**

Internal environment analysis is a crucial element for identifying an organization's strengths and weaknesses, necessitating the study of internal factors that may impact the organization's performance (Jones, Hill, 2010). The primary goal of internal analysis is to identify these factors and leverage them in strategic decision-making processes, exploring multiple alternatives to achieve the organization's desired objectives. This analysis leads to achieving several objectives, such as evaluating competencies, human resources, and available material resources, assessing the organization's competitiveness compared to others in the same field, identifying strengths to enhance and develop them, as well as identifying weaknesses to be addressed and finding mechanisms to mitigate them.

Strategic formulation is a step that follows the formulation of the organization's charter and the determination of its vision and mission, which involves setting goals, objectives, and values. After conducting both internal and external environmental analyses, strategic formulation becomes the actual point of strategic work, where the organization's main plans

are developed. Strategy formulation occurs at three levels: organizational level, business unit level (business unit strategy), and functional level (functional strategy).

2.3.8 Strategic formulation is based on three factors:

- Vision, Mission, and Goals: Vision refers to the long-term inspirational goal. Clarity of the organization's future image helps it maintain its market position and continuity of operation by defining the paths it will take to achieve the desired future (Dress et al., 2014).
- Mission: It represents the identity and uniqueness of the organization, distinguishing it from other organizations. It is the cornerstone for building the organization's goals and objectives by translating the vision into a message that highlights the organization's goals and objectives (Al-Kilani, 2019).
- Goals: They represent the results that the organization aspires to achieve without specifying the objectives. Goals are within a time frame, and for the organization to build its strategy based on goals, they must be clear, precise, measurable, realistic, achievable, and relevant to the organization's resources (Idris & Al-Ghalbi, 2012).

2.4 Future Studies

2.4.1 Introduction:

Looking towards the future is a characteristic that has distinguished humanity since the dawn of history, not exclusive to this era. Humanity has been characterized by constant change and instability, aiming to achieve a better future and overcome the challenges of the past. Therefore, the future has received deep interest in an attempt to explore it and understand its secrets and significance in life. As Albert Einstein answered when asked why he was interested in the future, he simply said because he will go there. Our world today witnesses rapid, unpredictable changes, encompassing all aspects of economic, political,

social, and even intellectual life. These changes have exerted significant pressures on humans, necessitating greater efforts, continuous learning, and acquisition of skills and knowledge to understand and adapt to these changes. Furthermore, it requires preparation for potential future problems, mitigating potential tragedies, and utilizing opportunities to develop and control capabilities (Imam, 2020).

Future studies do not mean speculating about the details of the future for individuals, society, or humanity; this is the realm of fortune-telling and reading destinies. Instead, future studies are cognitive and scientific skills for extrapolating general trends in human life, which in some way influence the trajectory of each individual and society. This facilitates individuals and societies to prepare and make decisions to make future expectations better (Fargh, 2016).

However, as humans realize the importance of the relationship between the past, present, and future, their interest in studying the future has increased. Future studies have become part of the mechanisms of making strategic decisions in advanced countries, with budgets allocated to them. Conversely, in the Arab world, future studies do not receive attention and lack scientific rigor except in academic circles, with some attempts (Nafie, 2017).

Therefore, it can be concluded that future studies are not a luxury for people who contemplate their fate but an attempt that entails costs that rise to the honor of the objective, a complex effort that intensifies debate in its nature but does not differ on its importance and necessity to be localized in the Arab world.

2.4.2 Origins and Development of Future Studies:

Since ancient times, human thought has been contemplating the past and present in an attempt to understand what the future holds. This interest in forecasting the future has been present throughout history, from philosophers and historians to religious scriptures and ancient civilizations. However, the formal study of the future as a science began in the early 20th century, driven by the urgent need to anticipate what lies ahead.

The scientific origins of future studies are subject to debate among researchers and historical analysts. Some attribute its beginnings to the works of Thomas More's "Utopia" and Francis Bacon's "New Atlantis" in the 16th and 17th centuries, respectively. Others point to Thomas Malthus' seminal work on population growth in the early 19th century or the speculative writings of Jules Verne in the late 19th century as significant precursors to modern future studies.

However, it was not until the early 20th century that the term "futurology" was coined by Ossip Flechtheim in 1930, marking the formal emergence of future studies as a recognized field. Since then, various terms such as "futurism," "future studies," "futuristic," and "foresight studies" have been used to describe this interdisciplinary domain of inquiry.

In recent times, there has been a growing recognition of the importance of future studies, particularly in advanced societies, where it plays a significant role in decision-making processes at the international, institutional, and corporate levels. However, in Arab and other developing countries, future studies remain underdeveloped, with limited contributions to planning and decision-making processes.

2.4.3 Concept of Future Studies:

Future studies, also known as futurology, is a systematic and methodical approach to forecasting and analyzing future trends and possibilities based on current societal trends and developments. It involves identifying potential future scenarios, assessing their likelihood, and exploring strategies to shape desirable outcomes. Unlike mere speculation, future studies rely on evidence-based analysis and multidisciplinary methodologies to inform decision-making processes and planning efforts.

In essence, future studies seek to explore what is possible, probable, and preferable in the future, considering both foreseeable and unforeseen events and their potential impact on individuals and societies. It aims to guide individuals and organizations in navigating uncertain futures by providing insights into emerging trends, challenges, and opportunities.

2.4.4 Distinguishing Future Studies from Strategic Planning:

While future studies and strategic planning share common goals of anticipating and preparing for the future, they differ in their approaches and objectives. Future studies focus on exploring multiple possibilities and scenarios without claiming to predict specific outcomes, whereas strategic planning aims to define and achieve specific goals through systematic planning and decision-making processes.

Moreover, future studies are distinct from traditional forecasting methods, as they emphasize the exploration of alternative futures rather than attempting to predict singular future outcomes. By considering a range of potential scenarios and their implications, future studies enable individuals and organizations to adopt more flexible and adaptive strategies to navigate uncertain and complex environments.

In conclusion, future studies represent a valuable tool for understanding and preparing for the challenges and opportunities that lie ahead. By adopting a systematic and multidisciplinary approach to exploring future possibilities, individuals and organizations can better anticipate and shape their futures in an ever-changing world.

The importance of future studies has become essential for countries, societies, and organizations. It is no longer a secondary matter to be taken lightly; rather, it is crucial for both developing and developed nations. The current century has brought with it numerous storms of change, necessitating collective scientific efforts to anticipate these changes through future studies techniques. This includes identifying challenges, opportunities, and preparing to confront unwanted opposing forces. Additionally, it involves dealing with accelerating changes across all fields.

Boulding (2016) argues that the significance of future studies lies in empowering nations to control their future. Planning and preparation are essential to avoid falling into problems and crises due to negligence. The proliferation of research centers and future studies in countries leads to a better and more stable life in all aspects.

The importance of future studies is also evident in several points, as seen by Agresti (2020) and Groff & Smoker (2014):

- Anticipating problems before they occur, making future studies an early warning system that requires preparation and advance planning to control or at least participate in shaping the future.

- Facilitating a rediscovery of ourselves, our resources, and energies, and discovering new ways to achieve rapid and comprehensive development. This helps developing nations regain confidence, rally their strengths, and sharpen their capabilities to confront future challenges.
- Clarifying possible and available choices and rationalizing decision-making methods by studying and examining each choice, surveying the implications and resulting outcomes. This provides an informational basis to help people make their political, economic, and social choices, rather than engaging in ideological debates and political conflicts where causes are mixed with results, making it difficult to distinguish objectivity from subjectivity.

2.4.5 The Importance of Future Studies

The importance of future studies, as summarized by Al-Hadif and Al-Obaid (2021), includes:

1. The need to understand and perceive the transformations and rhythms of global time.
2. The need to engage in the dynamics of global transformations.
3. The necessity to avoid exclusion and marginalization from the global arena.
4. The awareness of the global community's responsibility towards the future of generations.
5. The awareness of the seriousness of the fate of human civilization.

It is evident that there is a difference in the classification of the determinants of the importance of future studies, as some believe that their importance lies in the necessity of anticipating potential problems and planning to address them, while others see future

studies as a hallmark of civilized society. Their significance lies in the need to anticipate changes, prepare for the future, and keep pace with rapid changes. The community that is driven by investing in successive changes moves from one crisis to another until it becomes embroiled in an insoluble crisis. Herein lies the importance of future studies in enabling decision-makers to make quick and appropriate decisions to address future repercussions.

2.4.6 Principles of future studies

Principles of future studies, according to Al-Noubi (2018), include:

1. Extracting lessons from the past by studying major international and regional developments and their resulting effects, such as available opportunities, threats, challenges, and risks, to draw a future picture.
2. Imagining a future scenario for two or three decades to detail goals and interests using modern mathematics.
3. Avoiding ideological biases and starting from the premises and assumptions of various trends in scientific, ideological, technological, and intellectual research.
4. Identifying development mechanisms with scientific objectives and employing the necessary competencies to accomplish future paths and develop scientific competencies in managing complex challenges.
5. Achieving goals effectively by focusing on development factors in various sectors.
6. Preparing in advance for different scenarios and adopting them for potential emergency situations, aiming to use them by decision-makers according to the magnitude of potential future crises.

2.4.7 The stages of the evolution of future studies

The stages of the evolution of future studies, as divided by Professor Abdel Hay (2003), include:

- The utopia stage: A subdivision of organized human thought, envisioning social structures capable of solving real-world problems without sufficient indicators of the feasibility of achieving these imagined structures.
- The "long-range" planning stage: Anticipating changes and researching mechanisms for adapting to these changes, considering the future of a specific country or region.
- The global model's stage: Considering the future of the world as a whole, whether it affects the international community, the international system, or internationally relevant issues.

The foundations of future studies in global models are based on:

- Understanding the variables that lead to the collapse or survival of the international system in a state of balance.
- Identifying the available adaptation mechanisms of the international system to face potential changes.
- Identifying the capacities of international units to mobilize their resources to confront changes.
- Determining the legal justifications for intervention by external powers to address disruptions at the international level.
- Considering the change process as the rule.
-

❖ The evolution of future studies has taken two directions:

1. Institutional Direction: Future studies have become more globally oriented rather than regional or specific to a particular country. They aim for a more comprehensive approach rather than specialization in a particular sector.
2. Methodological Direction: Future studies have evolved methodologically through several stages:
 - The first stage emphasized projection, intuition, and a reductionist perspective.
 - The second stage witnessed the development of quantitative and qualitative methodologies, such as mathematical matrices, scenarios, probability theory, and simulation.
 - The third stage gradually shifted towards a holistic perspective, understanding that the whole is greater than the sum of its parts.

❖ Historical Context of Future Studies:

- First Stage: Dominated by religious thought, viewing the future as predetermined events.
- Second Stage: Scientific approach prevailed, considering the future as a definite outcome of interconnected events based on causality.
- Third Stage: Marked by uncertainty, acknowledging the complexity of intertwined and unpredictable events. This led to an acceptance of the inadequacy of a unidirectional view based on claims of causality. (Al-Mubarak, 2014).

Amr (2016) discussed the stages of development in future studies, categorizing them into three phases. In the first phase, the focus was on deductive reasoning, intuition, and reductionist perspectives. The second phase involved the enhancement of quantitative and inductive methods, such as mathematical matrices, decision trees, scenarios, probability

theory, triads, distance, play, simulation, and other techniques. Finally, in the third phase, there was a gradual shift toward a holistic perspective based on the idea that the whole is greater than the sum of its parts.

2.4.8 Methodologies and Tools of Future Studies:

Several methodological characteristics are crucial for future studies:

1. **Holistic Perspective:** Understanding future phenomena requires considering political, economic, social, demographic, environmental, technological advancements and global dynamics in their interaction to gain a comprehensive view of the future.
2. **Complexity:** Delving deep into understanding complex and dynamic realities, avoiding oversimplification, and utilizing transdisciplinary approaches.
3. **Historical Insight:** Reading prevailing and emerging trends, as well as opposing trends, provides valuable insights into possible future directions.
4. **Combination of Quantitative and Qualitative Approaches:** Effective future studies utilize both quantitative and qualitative methodologies, recognizing that a multi-method approach yields better results.
5. **Neutrality and Scientific Rigor:** Future studies should be neutral and scientific in exploring alternatives, analyzing claims, evaluating consequences, and engaging in continuous self-correction.
6. **Teamwork and Collective Creativity:** Collaboration among diverse experts fosters innovative solutions to problems by integrating different perspectives and methodologies.

7. Continuous Learning and Iterative Improvement: Future studies involve multiple stages of analysis, deep understanding, result refinement, and responsiveness to feedback, enhancing the quality of future projections.

2.4.9 Approaches and Models of Future Studies

There are four main approaches and models in future studies, as outlined by Al-Noubi (2018) and Golby (2011):

- Intuitive Model: This model relies on scientific knowledge but lacks a large base of information and data. It is derived from the insight gained from personal experience and attempts to identify interactions resulting from a specific issue. Therefore, intuition in such matters is not crucial; rather, estimation by the researcher is considered appropriate for some potential future scenarios.
- Targeted or Normative Model: This is an advanced version of the intuitive model but relies on the use of various scientific techniques.
- Exploratory Model: This model refers to the possible future through an example illustrating the relationships and connections based on the harmonious relationship between the past, present, and future. The present was once the future of the past, and the future is being shaped in our present.
- Backward Feeding Model: This model represents an advanced step in future methodological research. It combines the previous two models within a unified framework and focuses on all variables that manifest as reactions. Thus, this model relies on interaction, does not forget the past, and does not ignore the set causes that may arise to

change the course of the future. It combines exploratory research, organizational research, data, and facts, emphasizing the importance of imagination, creativity, and estimation.

2.4.10 Modern Future Studies Methods:

Future studies methodologies vary according to their intended purpose and the individuals involved. One of the most common and widely used methodologies is the Delphi Technique:

2.4.10.1 The Delphi Technique (Origin)

Its origins can be traced back to ancient Greek mythology, where there was a "Delphi Temple" where people sought guidance from priests and seers to inquire about their future and solve their problems. In 1950, the RAND Corporation used it, and in 1953, Olaf Helmer employed it to gather experts' opinions on the U.S. nuclear defense plan. Later, Helmer, along with researcher Norman Dalkey, developed a new technique called the "Delphi Technique" for predicting social science fields in 1959.

The Delphi technique, as defined by Nafe (2017), is a technique based on surveying the unknown through the use of organized and repetitive feedback to gather experts' opinions about the future. The Delphi technique is executed in a series of rounds, with each round's results being modified from previous rounds in future studies. It is used to make experts' knowledge clearer about the future, assess long-term outcomes, and evaluate long-term impacts. Dahman (2019) sees Delphi as one of the most important methods used in future studies, policy formulation, and possible alternatives. It benefits from the experience of experts and wise men and is the best and shortest way to reach future concepts and trends.

RAND used it in the military field in the 1950s, and it later spread to the educational, economic, technological development, social, scientific, and political fields, as well as strategic planning in major companies and organizations.

This technique involves presenting all possibilities for the development of a specific phenomenon in the future, relying on surveying methods, and then gradually eliminating some possibilities through steps and stages until settling on a certain possibility. The Delphi technique is the most common method in the American school of future studies (Khemissa, 2017; Linstone, H., 2015).

Characteristics of the Delphi Technique:

There are several characteristics of the Delphi technique as indicated by GennaroCovano (2023) and Mahmoud (2011):

- Designing a Survey Tool for Data Collection:

The Delphi technique utilizes a well-designed questionnaire as a tool for gathering information and data.

- Selection of Experts and Wise Men:

A group of experts and wise men is selected to provide their opinions through a series of rounds, which include:

1. First Round: Involves presenting an open-ended questionnaire to experts for their responses.
2. Second Round: Experts participate in analyzing the results of the previous round.

3. Third Round: Experts interact, leading to the formulation of scenarios agreed upon by all experts or by a consensus of 75% or less.

❖ Strategies for Implementing the Delphi Technique:

❖ First Strategy - Expert and Specialist Foresight:

- First Stage: Identifying the phenomenon under study and analysis.
- Second Stage: Selecting a group of competent experts and specialists with theoretical and practical knowledge of the phenomenon under study.
- Third Stage: Adjusting the time frame for the phenomena under study and analysis.
- Fourth Stage: Directing a series of questionnaires containing questions and expected possibilities regarding the future of the studied phenomenon.

Fifth Stage: Involves obtaining results through calculating the frequency of responses from these questionnaires.

- Second Strategy - Absolute Value Strategy for the Delphi Technique:

- First Stage: Identifying the future goal.
- Second Stage: Identifying the influential variables.
- Third Stage: Arranging variables according to their importance and impact.
- Fourth Stage: Assigning numerical values based on the importance of the variable, from highest to lowest.
- Fifth Stage: Determining the time frame.
- Sixth Stage: Foresighting the future based on:
 - Calculating the absolute value.
 - Using the equation: $(\text{Total impact points} \times 100\% \text{ absolute value})$.

- Studying and foresighting the future.(Nafi, 2017, Badr, 2004)

Supportive Techniques for the Delphi Technique:

There are several supportive techniques for the Delphi technique, outlined by Abdulhay (1996) and Nafe (2017):

1. Future Wheel Technique:

This technique involves two steps:

- Drawing an initial circle containing the central event to be studied, represented by a single word or very short sentence, called the central circle.
- Drawing a number of additional circles, determined by the number of direct effects envisaged for the event, each of which is connected to the central circle.

2. Fragmentation Technique:

- This technique is an auxiliary technique for the Delphi technique and involves determining probabilities for event possibilities based on a number of criteria, including:
- The presence of unrelated factors leading to increased probability.
- Clarifying how a specific variable increases or decreases the importance of another variable.

3. Prediction Technique:

This technique involves collecting credible information and facts to identify the possible future, contingent upon providing sufficient data to provide a basis for prediction.

2.4.10.2 Scenarios

This method emerged in the mid-1970s and describes a possible, likely, or preferred future situation based on the current situation or an assumed initial situation. Scenarios present alternative possibilities for the future, presenting a range of choices to the future researcher and displaying their expected outcomes, whether positive or negative. However, they do not accurately determine when and how a specific phenomenon will occur in the future but rather attempt to adjust the general contexts of social phenomena and governing variables in each context individually. Thus, the scenario technique is a probabilistic analytical method that helps track and monitor the evolution of international events and phenomena from the current situation, leading to a series of future predictions for these events and phenomena (Gahner, R., Kosow, 2010).

Aziz (2014) believes that the future scenario provides a description of the possible or desired future situation and clarifies the characteristics of the path or paths leading to it, based on the current situation or a possible initial situation.

Al-Anayah (2017) defines scenarios as one of the main branches of future science, describing various expected events and analyzing their results, its function is to prepare stories about the future that include the past, present, and description of an expected future, more than being potential predictions of a real future, scenarios are a series of forecasts for upcoming events and a coherent vision of a possible future.

Scenario Characteristics:

Writing a scenario requires creativity and deep intellectual imagination, grounded in a precise scientific approach to uncover facts. It relies on major real-life events and aims to achieve national, political, military, or economic objectives, or at least get closer to them.

The scenarios, ranging from two to four, are formulated with utmost secrecy in the data used by experts in relevant fields related to the studied phenomenon. Moreover, scenarios can be based on input from various experts and scientists (Noubi, 2018).

Sabagh (2009) outlines the requirements for writing scenarios as follows:

Gathering the necessary information and data for the selected scenarios.

Monitoring the expected responses of all parties involved in the chosen scenario.

Formulating scenarios that include three elements: initial conditions, future trajectories, and future situations.

Scenario Sections:

There are several sections to a scenario. Noubi (2018) divides the scenario into two sections:

Creating the Crisis: This positive scenario imposes its will by creating a specific crisis to compel the other party to accept a particular decision. It involves active and positive measures and imposes specific positions on the leadership of the other party to deal with them, thereby implementing the decision. This type of scenario has been witnessed in the past decade in the Gulf or other parts of the world, such as active attack scenarios to deal with external or internal events.

Crisis Confrontation: Its measures are defensive to harness resources, determine the approach, and employ individuals and institutions to address crisis stages. This scenario maintains the safety and continuity of the state and organizations, preventing them from being subjected to strong shocks.

Steps for Building a Scenario:

According to Noubi (2018), the methods for building future scenarios are:

Intuitive Non-Systematic Method.

Systematic Model Method.

Interactive Method, which involves interaction between intuitive and systematic approaches.

The scenario goes through four stages:

Identifying the phenomenon subject to study and analysis.

Collecting information and data related to the phenomenon under study.

Adjusting all contexts of the phenomenon's development according to available information and data.

Assessing the results and consequences of adopting one of the phenomenon's future development contexts (Gahner, R, Kosow, 2010).

Types of Scenarios:

The main intellectual currents of future studies classify their scenarios into three types:

Directional or Linear Scenarios: They maintain the current situation of the future international phenomenon, requiring a linear projection of the current image of the phenomenon onto the future.

Reformative Scenarios: These focus on the idea of making some reforms to the studied international phenomenon, quantitatively and qualitatively, which may result in a rearrangement of the peaceful hierarchy of variables controlling the development contexts of the studied phenomenon, indicating its potential improvement in the foreseeable future.

Transformational or Radical Scenarios: These scenarios aim to break away from the contexts included in previous scenarios. They reject maintaining the current situation or making some modifications to the studied phenomenon. Instead, they go further by focusing on the idea of deep radical change in the studied phenomenon, internally and

externally, by taking into account a few possible variables that can radically change the general context of the phenomenon under study if they occur.

Scenarios can be diverse, classified as follows (Al-Sen, 2011):

Exploratory Scenarios, branching into several scenarios:

- Continuation of current general trends.
- Possible scenarios.

Targeted or Desirable Scenarios: They can vary greatly depending on the desired goal or focus area, reflecting the aspects of the studied phenomenon.

Scenario Objectives:

The objectives of scenarios are summarized in presenting alternative possibilities inherent in future developments. Different scenarios reveal the results arising from these different alternatives, directing people's attention to key actors, their strategies, and the interrelationships or processes. They also highlight critical issues for decision-making priorities, aiming to empower people in these matters and stimulate their interest. This is to assist them in making better decisions about the present future.

In this context, some proponents believe that scenarios can influence people's thinking or future orientations. However, this influence is not towards a specific direction by presenting explicit recommendations for future studies, but rather a general and indirect influence. Developing future dimensions in people's thinking, presenting alternative visions of future paths, and rational discussion about the options presented may lead them to reject all of them and formulate new, better ideas from their perspective.

On the other hand, another perspective sees future studies differently, viewing them as a blend of science and targeting. Future studies are scientific because they rely on present logic and reason to develop the future. They start from causal relationships. However, they are also targeted because they are not neutral or free from values or judgments. Future

studies or the process of comparing and analyzing scenarios must be based on goals and values translated into indicators that are relied upon when comparing scenarios and evaluating them, or guiding people on how to choose between them.

Given this situation of future studies, the proponents of this approach look at them and then look at the process of building and analyzing scenarios not just to understand the world but as a tool to change it. They treat them as the basis for adopting a desirable future vision, working on guiding people and changing their decisions and behaviors to turn this desired future vision into a real reality. Therefore, they believe that analyzing scenarios should lead to explicit recommendations on the choices and decisions that must be made now to achieve the desired future situation (Nafei, 2017), (Al-Mansouri&Al-Dhuhouri, 2019).

Characteristics of a Good Scenario:

Good scenarios are characterized by differentiation and distinctiveness, ease of understanding and comprehension, consistency and coherence between their components. They are plausible and not just imaginary or illusory. Additionally, they have the ability to reveal turning points in trajectories or disruptions and predict events that lead to deviation from the scenario's natural course or cause disruptions (Al-Sen, 2011) and (Al-Arabi, 2018).

Differences between the Delphi Technique and Scenarios

#	#	Delphi	Scenario
1	Definition	It is a repeated survey of expert opinions to achieve consensus among them	It is an exploration of different potential futures through the construction of scenarios.
2	Objective	Aims to achieve consensus among a group of experts regarding future predictions or potential solutions to a specific issue or topic. This	Aims to help organizations and decision-makers prepare for different possible futures by exploring a wide range of potential

		method is particularly useful in cases where the subject is complex and requires the integration of diverse opinions and expertise	scenarios. It also provides a framework for analyzing probabilities, challenges, and opportunities.
3	Components	<p>Group of Participants: A group of experts in the field relevant to the study's subject.</p> <p>Questionnaires: Questions posed to the experts through consecutive and iterative rounds.</p> <p>Iterative Rounds: Several repeated rounds of questionnaires where experts are asked to reassess their evaluations after being exposed to the opinions of other participants in each round.</p>	<p>Variables and Factors: Identifying the key variables that could influence the future.</p> <p>Scenarios: Developing detailed narratives that illustrate how these variables might evolve over time.</p> <p>Evaluation: Analyzing the impact of each scenario and then providing recommendations and strategies to address it</p>
4	Areas of Application	<p>Future Research: To forecast future trends in various fields such as technology, healthcare, and education.</p> <p>Policy Development: To assist policymakers and decision-makers in identifying the most effective strategies and practices.</p> <p>Risk Prediction: To assess potential risks and develop contingency plans to address them</p>	<p>Strategic Planning: To assist organizations in developing their strategic plans to adapt to various potential futures.</p> <p>Risk Management: To evaluate potential risks and create plans to address future challenges.</p> <p>Education and Training: To use scenarios in realistic simulations aimed at training individuals to navigate and respond effectively to future developments.</p>

5	Reason for Selection	<p>Achieving Consensus: This technique is effective in reaching consensus among a group of experts.</p> <p>Addressing Complex Topics: The Delphi technique is used when there is a need to gather diverse opinions and expertise</p>	<p>Exploring Different Futures: The scenario technique is effective in exploring a wide range of possible futures.</p> <p>Analyzing Probabilities: It helps analyze various probabilities, challenges, and opportunities</p>
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2.5 Previous studies

2.5.1 Arabic Studies:

1. (Qaymash, 2023) titled ‘Artificial Intelligence and Its Role in Achieving Sustainable Development - A Case Study of the United Arab Emirates’.

The study aimed to explore the extent of artificial intelligence’s contribution to supporting and achieving sustainable development goals, focusing on a case study of the United Arab Emirates. The UAE has adopted a clear-cut strategy to embody the dimensions of sustainable development and leverage available opportunities to achieve its objectives. This involves integrating artificial intelligence applications across targeted domains such as environment, education, health, economy, etc. The study highlighted that this was accomplished through the launch of the 2031 Artificial Intelligence Strategy, along with the establishment of several subcommittees and councils to support these efforts. The goal is to achieve greater economic growth, facilitate societal well-being, and ensure stability for future generations.

The key findings were as follows: 1. The introduction of artificial intelligence across various sectors will contribute to linking and gathering information between them, making the work of various fields easier. 2. Artificial intelligence has had a positive impact on several sectors and fields, such as the transportation sector, ports, telecommunications, tourism, finance, the stock market, and various service sectors in the United Arab Emirates . 3.The United Arab Emirates has also made significant strides in global economic freedom, the digital economy, infrastructure quality indicators, as well as network readiness and e-services. 4. Furthermore, artificial intelligence achieves many gains that can be leveraged for comprehensive development across all sectors and fields, including economic, social, and environmental.

2. (Ghazi, 2023) Titled ‘Applications of Artificial Intelligence in Strategic Planning to Enhance a Sustainable Future for Business Institutions’.

The study aimed to shed light on institutions in an era of significant changes and rapid transformations. We observe the remarkable ability of digital technology, represented by artificial intelligence, to design exceptionally creative and useful content. This contributes to creating new patterns for task performance and providing innovative methods to accelerate achievements across various fields. Artificial intelligence is one of the most significant outcomes of the Fourth Industrial Revolution. Its applications span multiple domains, including military, industrial, economic, technological, medical, educational, and service-related areas. The study also discussed criteria for artificial intelligence and posed an important question that resonates with strategic planners, especially given the substantial advancements in AI utilization within both organizational and personal contexts.

3. (Maharab, 2023) Titled Artificial Intelligence: Concept and Applications

The study aimed to explore the concept of artificial intelligence (AI) and its applications. AI is a branch of computer science. The study discussed the origins, philosophy, types, approaches, and challenges related to AI, noting that there is no unified theory or model guiding AI research. The study also reviewed several AI applications, including Siri, Amazon, Chat GPT, ELSA, and Cortana. It concluded by presenting examples of AI technology usage in various aspects of our daily lives, spanning education, healthcare, marketing, banking and finance, military and security, transportation and communication, space exploration, agriculture, environmental care, Arabic language, architecture, fashion design and production, psychology, translation and publishing, and music. The study concluded by presenting examples of AI technology usage in various aspects of our daily lives, spanning education, healthcare, marketing, banking and finance, military and security, transportation and communication, space exploration, agriculture, environmental care, Arabic language, architecture, fashion design and production, psychology, translation and publishing, and music.

4. (Al-Khoulani, 2023) Titled Strategic Human Resource Planning.

The study aimed to highlight the importance of human resource planning in organizational strategy. This role involves anticipating the organization's future human resource needs in terms of quantity, specializations, and skills. It also contributes to achieving the organization's strategy and mitigates risks associated with the human element. Human resources are considered a vital component of the production system and one of the key

factors that shape an organization's identity and future. Human resource planning plays a crucial role in directing societal progress and determining the organization's position. Therefore, individuals are fundamental to efforts aimed at achieving progress in a complex and ever-changing world.

5. (Harb, 2022) Titled 'A Futuristic Vision for Adopting Artificial Intelligence Techniques in Palestinian Satellite Channels'.

The study aimed to provide a forward-looking vision for adopting artificial intelligence (AI) technologies in Palestinian satellite channels between (2021 - 2031). The study was based on practitioners' attitudes toward the current use of AI technologies, their level of interest, and the factors influencing their adoption over the next decade. The goal was to create a solid knowledge map and envision the future by considering various potential scenarios. The study was conducted on a purposive sample of (81) individuals involved in communication with Palestinian satellite channels. Future scenarios for adopting AI technologies in these channels were presented, and the results indicated that economic factors play a crucial role, given the substantial material resources required for implementing these technologies. The reference scenario (stability) was the most likely to adopt this vision by 2031, followed by the optimistic (reform) scenario, and finally the pessimistic (collapse) scenario.

6. (Mujnah, 2022) Titled 'The Importance of Future Studies and the Need to Settle them in the Arab World: Political Studies Model'.

The study aimed to shed light on the necessity of deepening future studies and making them a standalone scientific activity. This endeavor was adopted across various fields, particularly in the realm of political science. By establishing a field of future studies, we can gain insights into the future of political phenomena, especially within the Arab world. The goal is to enhance the quality of administrative, political, and strategic performance, improve its overall quality, and mitigate the impact of undesirable negative outcomes.

7. (Nassar, 2017) Titled ‘Scenarios for Anticipating the Future of Professional Development for Faculty Members in Arab Universities in Light of the Fourth Industrial Revolution Requirements’.

The study aimed to construct a future vision for the professional development of faculty members in light of the innovative scenario. The study employed both descriptive and future-oriented methodologies, utilizing scenario-based approaches. The study yielded several results, including the presentation of three scenarios for anticipating the future of professional development for faculty members. These scenarios are: the reference scenario, the reform scenario, and the innovative scenario. Additionally, the study built a future perspective for the professional development of faculty members in Arab universities, considering the innovative scenario.

8. (Mohammad, 2020) Titled Future Studies and the Importance of Resettlement in the Kurdistan Region-Iraq.

The study aimed to shed light on the topic of future studies, given its significant importance. This importance lies in preparation, readiness, and concerted efforts to equip

the region of ‘Kurdistan, Iraq’ with all the necessary elements of strength, qualifying it to assume its role within the global framework. The study also addressed the challenges related to the concept of futures studies, its principles, components, techniques, and the feasibility of localizing it in the region. By utilizing a descriptive-analytical methodology and drawing from various sources, the study answered these challenges, considering the tangible realities of the region. The study emphasized the utmost importance of its subject. The study has reached several conclusions, the most important of which is that futures studies is a science based on principles, with common components and techniques. It can be applied globally. Additionally, it has become evident that the region faces diverse challenges that hinder the localization and establishment of futures studies.

9. (Al-Issawi 2020) Titled ‘Future Studies and the Egypt 2020 Project’.

The study aimed, in its first section, to highlight the importance of expanding the field of future studies in Egypt. It explored the objectives achieved by such studies and discussed the research methodologies and approaches used to explore the future. Furthermore, it examined the relevance of these studies to the processes of development, planning, and decision-making. The study also included a practical and scientific case study in its second section, focusing on Egypt’s future. This case study, known as ‘Egypt 2020 Project,’ documented the steps taken, the motivations behind it, and the distinctive alternative methodology employed. Additionally, the study addressed work organization methods and some of the project’s products that have emerged or are about to emerge. It emphasized the importance of addressing obstacles and finding solutions to overcome them in pursuit of development.

10. (Salama, 2019) Titled ‘Occupation and the Stumbling of Local Economic Development in Palestine’.

The study aimed to shed light on the disruption and local economic development challenges in Palestine. It began by introducing the concept of ‘local economic development,’ which crystallized after World War II. Developing countries found themselves in urgent need to overcome the crises left by colonialism. Following their political independence, these nations made special efforts to liberate their economies from dependency and achieve economic growth across all sectors. The study discussed several points, including local economic development in Palestine, developmental initiatives in Palestine before the Oslo Accords, developmental initiatives in Palestine after the establishment of the National Authority, the Palestinian strategy for local economic development, opportunities and potentials for development in Palestinian territories, local economic development challenges and obstacles. The study also highlighted external and internal impediments. In conclusion, the future of development in Palestine depends on the end of Israeli occupation, allowing Palestinians to control their resources. Without this, they will remain dependent on foreign aid, perpetually constrained by budget deficits, and hindered in their development process.

11. (Isref, 2019) Titled Foreseeing the Future of Human Resource Management Functions in Light of the Application of Artificial Intelligence Techniques: A Study Applied to the Municipality and Planning Department in the Emirate of Ajman – UAE.

The study aimed to anticipate the future roles of human resource management in light of the application of artificial intelligence techniques in the United Arab Emirates. The study sample consisted of 100 male and female employees from the Municipality and Planning Department in the Emirate of Ajman. The study used a questionnaire as a tool for . It was divided into five axes representing the activities and functions of human resource management: recruitment, selection, and appointment; training; performance improvement; and evaluation. Additionally, there was a fifth axis that addressed artificial intelligence and its impact on human resource management. The study concluded that the future will heavily rely on artificial intelligence techniques and tools for performing human resource management functions. The study ultimately recommended the need to prepare employees for performing tasks using artificial intelligence techniques. This includes incorporating educational materials on artificial intelligence at all educational levels.

12. (Al-Shaher, 2019) Titled ‘Syria After the War: A Reading of Reality and Prospects for the Future’.

The study aimed to explore strategic foresight for Syria, encompassing an examination of the conceptual and theoretical framework of foresight studies. It emphasized that future studies have become a field of knowledge with increasing demand and interest. The question of the future is pivotal in modern thought, especially given current developments. The study also discussed how Syria’s future projects are impacted by challenging circumstances, considering the relationship between the future and the past, as well as the contemporary context with heritage. It raised several questions about the potential scenarios for Syria after the end of the war and the commencement of the reconstruction phase.

Notably, scenario development and future prediction are complex processes with uncertain outcomes.

13. (Al-Wakeel, 2019) Titled ‘Strategic planning in education: its nature and steps’.

The study aimed to explore the concept and steps of strategic planning in education. It delved into the intellectual and historical evolution of strategic planning, discussed the reasons for its inclusion in educational systems, and outlined the stages involved in strategic planning—from defining the institution’s mission and vision to reaching the monitoring and evaluation phase of the strategic plan. The study concluded by emphasizing that strategic planning relies particularly on the continuous availability and flow of detailed information and data. Furthermore, this information should not only be related to the general framework of the problem or issue under consideration but also connected to the finest details of both the internal and external environments relevant to the specific case or problem.

14. (Falah, 2019), Titled ‘The Importance of Future Studies in the Success of the Strategic Planning Process’.

The study aimed to highlight the importance of future studies as a scientific field that contributes to enhancing the performance efficiency and decision-making capabilities of policymakers. It enables strategic planners to address emerging and anticipated challenges and identify appropriate alternatives during the strategic planning process. Additionally, the study explored the future of futures studies in Arab countries.

15. (Al-Rayhan, 2018) Titled ‘The Reality of Future Studies in the Arab World’.

The study aimed to shed light on the reality of future studies in the Arab world. The issue of predicting the fate of humans and societies in the future has become a central focus for many, as it is relevant to the past, present, and future. The study emphasizes the importance of future studies, which help outline the contours of tomorrow. Most countries around the world have relied on these studies to shape their policies in the post-World War II period, aiming to avoid anticipated negative changes that could impact the effectiveness of these plans and policies, the Scholars have divided the field of future studies into three stages. The first stage included Plato's vision of what society should be like in the future, which he presented within the framework of the ideal city, known as the 'utopia.' The second stage began with the Soviet government's planning to establish a committee to deliver electricity to the third phase explored global models that focus on the future. The study also emphasized the importance of studying the future. In conclusion, Arab societies' reluctance to pursue future studies can be attributed to various reasons.

16. (Abdelmotaleb, 2018) Titled 'Strategic Planning Methodology for the University'.

The study aimed to define the origins of strategic planning, explore the underlying theory, and illustrate its connection to enhancing the competitive capabilities of organizations. Additionally, the study analyzed the terms planning, strategy, and strategic planning, highlighting the multiple characteristics that make strategic planning a comprehensive methodology for supporting organizational competitiveness, The study discussed the objectives of strategic planning and its contribution to enhancing the competitive capabilities of universities. The research findings highlighted the importance of utilizing the

strategic planning process to support competitiveness in both universities and organizations in general.

17. (Al-Naimi, 2018) Titled ‘The Future and Economics in Future Studies’.

The aim of this study was to explore the future and economy in future studies. The study provided an overview of the evolution of the science of the future, highlighting the differences in fundamental concepts and terminology in this modern field. It also discussed how to initiate future studies and emphasized the importance of this field, which has witnessed significant developments both in theoretical and practical aspects. The study defined the framework for future studies and stressed the importance of establishing a strong knowledge base. Additionally, it addressed the challenges faced by researchers in studying the future. Furthermore, the study examined various forms of future studies, including survey-based, exploratory, quantitative, and full-model studies. In the end, the study emphasized the importance of future studies and their impact on the economy. Economics is one of the fields that has received significant attention from future studies since the early 19th century. We must always have an interest in the principles of this specialization to keep up with future developments and challenges.

18. (Al-Noubi, 2018) Titled ‘Science of Future Studies’.

The study aimed to explore the nature of future studies, mentioning its principles and emphasizing the importance of extracting lessons from the past through the study of international and regional developments and their impacts. It also presented a future outlook for the next two decades to define goals and interests. The study reviewed models

of future studies and details of scenario techniques. It delved into initial trends and features in Arab future studies, distinguishing between mixed concepts and methodological challenges. Finally, it highlighted the significance of historical studies and their philosophical view of history in defining societal objectives.

19. (Nafe, 2017) Titled ‘Strategic Foresight for the Future’.

The study aimed to explore strategic foresight for the future, seeking to understand its concept, importance, objectives, principles, and foundations. It also addressed the obstacles facing this type of research, such as the absence of future vision and a negative outlook toward the future. The study further discussed methods and approaches for future studies, including foresight techniques like scenario building. Finally, it highlighted strategies for implementing Delphi technology.

20. (Farig, 2016) Titled ‘Futures Studies in Modern and Contemporary Arab Thought’.

The study aimed to shed light on the importance of ‘future studies’ in modern and contemporary Arab thought. It has become one of the most important reasons for change, development, and progress. Consequently, it enables us to respond to various and rapidly evolving future challenges. It also defined the field of future studies as the study of current and historical social, political, and technological developments. Its purpose is to understand the likely, possible and desirable changes that will lead to expected progress in the future. The study concluded by explaining that the need for future studies in Arab thought is imposed by the historical situation of the Arabs in the twenty-first century and their position in human civilization.

21. (Amr, 2016) Titled 'Future Studies: A Tool for Political Change'.

The study aimed to shed light on futures studies as a tool for political change. It explored various questions about the nature of futures studies, their methodologies, tools, and whether they are scientific studies or mere speculation and predictions. Additionally, it examined whether the results of futures studies are deterministic or probabilistic. "Have future studies become a necessity, or are they merely scientific indulgence that doesn't add much? And finally, do these studies contribute practically and significantly to future change. The Study focused on the stages of the evolution of futures studies from the perspective of Dr. Waleed Abdelhay, the study revealed South Africa's experience. It emphasized the scenarios agreed upon by participants in the national conference on South Africa's future to address the crisis in Africa. The study's conclusion indicates that what is now known as 'future studies' is a serious field based on scientific methodologies and standardized study methods. It enjoys recognition and respect across scientific circles and has become one of the most important sciences for thinking and planning for the future. Its significant impact extends to changing realities, whether at the level of countries, institutions, collective entities, or the world as a whole.

22. (Boubaker, 2016) Titled 'Strategic Planning: Components, Models, and Dimension'.

The study aimed to highlight the importance of strategic planning as a fundamental axis for organizations seeking to establish a strategic framework based on scientific and practical foresight and prediction. Strategic planning, in its processes, focuses on defining long-term goals and devising effective methods to achieve them. Additionally, it is a logical process

aimed at achieving specific objectives and enhancing organizational performance. It is essential for navigating the unstable conditions surrounding institutions and maintaining their diverse assets and competitive position in the market.

23. (Belmouadden, 2016) Titled Legal, Epistemological, and Methodological Foundations for Foresight

The study aimed to provide an overview of the book 'Future Studies: The Legal, Epistemological, and Methodological Foundations of Foresight.' The book covers five key points. The first point focuses on the study of 'change,' which is considered a tangible phenomenon and a constant cycle. It holds intrinsic value in human thought. The second point discusses analytical methods, including dissection, decomposition, and returning to essential and core components. These methods span both quantitative and qualitative approaches, highlighting their suitability for achieving accuracy, correctness, and objectivity. The third point introduces five techniques that fall under standard methodologies: scenario planning, mental stimulation, causal gradient analysis, reverse prediction, and role technique. The fourth point encompasses mathematical methodologies, emphasizing precision, conciseness, and objectivity according to scholars. Finally, the fifth point follows quantitative patterns, characterized by a descriptive nature. The study concludes that the book contributes to the accumulation of knowledge in the field of future studies, particularly in the Arab world. It underscores the importance of encouraging researchers to explore this type of study for the advancement of nations amidst internal and external challenges faced by the Arab world.

2.5.2 Foreign studies:

1. (Yadav et al., 2024) Titled ‘Artificial Intelligence: The Future’.

The study aimed to define and explain the concept of artificial intelligence, its origins, and objectives. The study also discussed the classifications of artificial intelligence and its application domains. Additionally, it reviewed an international report on the future of jobs, such as the General Economic Forum’s report in May 2023, and highlighted the resulting outcomes. Furthermore, the study elucidated the economic impact of artificial intelligence on the selected G20 countries and provided information on its ability to enhance economic growth in India.

2. (korinek, 2023) Titled ‘Generative AI for Economic Research: Use Cases and Implications for Economists’.

The study aimed to demonstrate the extent of generative artificial intelligence’s capability to revolutionize research. The study analyzed the potential of large language models (LLMs), such as the application ‘ChatGPT,’ in various domains. These domains include thinking and feedback loops, writing, background research, data analysis, mathematical coding, and derivations. The study also provided general guidelines and specific examples on how to leverage these use cases.

3. (Amer et al. ,2013) Titled A review of scenario planning.

The study aimed to review the literature on scenario planning with the goal of addressing several questions. It also discussed the differences between qualitative and quantitative scenario methods, highlighting the advantages and drawbacks of each. The study delved

into the techniques used in quantitative scenario planning, which often result in the creation of numerous what are known as ‘raw scenarios.’ These raw scenarios require further refinement and discussion. The study also touched upon how scenario planners choose which explorations to pursue and what constitutes an appropriate number of selections. Finally, it concluded by discussing methods for validating scenario studies.

2.5.3 Comment on previous studies

In light of reviewing previous studies related to the study topic, the researcher identified a set of points that can be summarized as follows:

- The current study agrees with the majority of previous studies on the importance of future studies as the cornerstone for building strategies, whether at the international or organizational level.
- Previous studies have shown richness and diversity in the knowledge and methodological framework, as well as the application communities, and have demonstrated experts' tendencies towards using artificial intelligence applications in strategic planning processes, in addition to foresight techniques.
- Some studies have emphasized the importance of using artificial intelligence techniques in strategic planning processes.
- Some studies have emphasized the importance of using artificial intelligence techniques in future studies.
- The compatibility of advanced technology with the needs of both strategic planning processes and future studies.

- Some studies were similar to our study in using scenario techniques and the Delphi technique.
- There is a lack of Arabic studies that have addressed artificial intelligence techniques in general, and foresight techniques in Palestine specifically, which highlights the significant importance of the current study.
- The researcher found a set of studies related to the main research variables, which helped her choose the appropriate methodologies for her study, Study (Qaymish, 2023), Study (Ghazi, 2023), Harb Study (2022), Study (Asref, 2019), Study (Falah, 2019), Study (Al-Rayhan, 2018), Study (Abdul Muttalib, 2018), Study (Al Nuaimi, 2018).
- The current study objectives align with the Study (Qamish, 2023), Study (Ghazi, 2023), Harb Study (2022), Study (Asref, 2019), Study (Al-Rayhan, 2018), Study (Abdul Muttalib, 2018), Study (Al-Nuaimi, 2018), Study (Nafi, 2017), study (Farge, 2016), study (Amr, 2016).
- The majority of previous studies, especially the important ones, contributed to Study (Boubakar, 2016), article (Amr, 2016), study (Farge, 2016), study (Al-Noubi, 2018), study (Al-Nuaimi, 2018), study (Al-Rayhan, 2018), study (Fallah, 2019), study (Al-Shaher, 2019), study (Asref, 2019), study (Salama, 2019), study (Nassar, 2021), study (Mijanah, 2022), war study (2022), study (Ghazi, 2023), study (Qamish) , 2023), study (Yadav et al., 2024), In highlighting the importance of future studies as a valuable tool for political, economic and social change.
- Previous studies highlighted, including: Study (Boubakar, 2016), Study (Amr, 2016), Study (Farge, 2016), Study (Al-Noubi, 2018), Study (Al-Nuaimi, 2018), Study (Al-Rayhan, 2018), Study (Fallah, 2019), Study (Al-Shaher, 2019), Study (Asref, 2019), Study (Salama,

2019), Study (Nassar, 2021), Study (Majanah, 2022), Harb Study (2022), Study (Ghazi, 2023), Study (Qamish, 2023), study (Yadav et al., 2024). The importance of adopting future studies, strategic planning, and artificial intelligence techniques lies in creating a proactive vision for development and formulating anticipatory plans to leverage available opportunities and address potential challenges.

- Previous studies emphasized the importance of localizing future studies in the Arab context, including: Study (Asref, 2019), Harb Study (2022), Study (Muharib, 2023), Study (Ghazi, 2023), Study (Qimish, 2023), Study (Kornick, 2023), Study (Yadav et al., 2024).
- Previous studies have indicated the appropriate tool for identifying the current state of development requirements in Palestine under the unstable political, economic, and social conditions.
- Previous studies have focused on formulating the research problem, defining its significance, objectives, and questions, and dividing the study into chapters and sections that address all aspects of the analytical and cognitive research problem.
- Reading the theoretical literature of previous studies helped the researcher formulate the theoretical and conceptual framework for the current study. It also assisted in identifying some useful sources and references for her research. Furthermore, these studies contributed to expanding the researcher's knowledge on how to create a comprehensive and coherent scientific research that encompasses all its elements.
- After reviewing the foresight techniques used in previous studies, assist the researcher in defining the survey questionnaire structure and identifying appropriate analysis techniques. Additionally, help the researcher analyze the results and compare them with their current study.

- The benefits derived from previous studies include deepening the understanding of the research problem and clarifying it, specifying the objective dimensions of the study more precisely, identifying the reference dimensions that establish artificial intelligence and its techniques, foresight techniques, and strategic planning, and deriving potential future paths for adopting artificial intelligence techniques and strategic planning in future studies research.

The researcher perceives that what distinguishes her current study from others is the absence of previous studies (according to her knowledge) addressing the use of artificial intelligence in studying future development prospects in Palestine. Consequently, this study will be the first to shed light on the use of artificial intelligence in foresight for development in Palestine under unstable political, social, and economic conditions.

Chapter Three

Methodology

3.1 Introduction

This Chapter describes the research methodology, design, data collection, and analysis techniques.

3.2 Research Approach

This study belongs to the field of futures studies, utilizing a multidisciplinary approach based on case studies. It aims to identify future scenarios in Palestine amidst unstable political, economic, and social conditions. By analyzing potential and future trends for Palestine, constructing future scenarios, and prioritizing them, the study employs artificial intelligence techniques to develop a model that guides efforts and decisions towards sustainable and beneficial directions for Palestine's future based on a long-term vision. The multidisciplinary approach is defined as a research methodology that blends various scientific and academic disciplines to collaboratively address complex issues that cannot be effectively tackled by a single discipline alone. This approach requires close cooperation between experts from different fields, as well as the involvement of non-academic stakeholders such as civil society, the private sector, and policymakers. It helps in providing innovative and sustainable solutions to the complex challenges facing society. (International science council, 2024).

A multidisciplinary approach is one that facilitates the exchange of knowledge and research experiences, leveraging diverse intellectual backgrounds and various research

methodologies among researchers. It integrates these elements into a comprehensive conceptual and methodological framework, contributing to a broader understanding of phenomena and problems. This approach leads to more accurate results and practical solutions (Samarkandi, 2018).

Additionally, the multidisciplinary approach is the prevailing trend in futures studies. Futures studies attempt to predict long-term developments by analyzing the current situation to identify noticeable trends and seeds of change. Instead of relying on a set of techniques designed for specific applications, this approach leads to the formulation of various scenarios, with their impacts assessed across different levels and time frames. (Ehresmann&Poli, 2013).

A case study is a research methodology used to study a specific subject in great detail. It involves the researcher delving deeply into a unique or singular topic to gather comprehensive information,(Al-Nahari and Al-Sarihi, 2002). A case can be an individual, a group, an institution, an organization, an issue, or an event. This type of study is considered descriptive because it can examine a single case or a separate unit with precision, depth, and attention to provide a more comprehensive picture of the phenomenon under study in a specific community, (Hamdi Wastoutah, 2019). This is relevant to the current study, which focuses on examining the state of development in Palestine under unstable political, economic, and social conditions. which is relevant to the current study, which focuses on examining the state of development in Palestine under unstable political, economic, and social conditions, and which relies on the use of the elite opinion survey methodology.

Given the novelty of the study's subject and the instability in social, economic, and political indicators in Palestine, and the significant impact of external and internal factors on its future behavior, especially with the ongoing genocide in Gaza and attempts to annex the West Bank, the researcher will use a multidisciplinary approach (quantitative and qualitative) to collect, analyze, and interpret information.

An elite opinion poll is a type of survey that targets a specific group of individuals who are considered experts or influential in a particular field. This type of survey is used to gather the opinions and expectations of these elites on certain issues, whether they are political, economic, social, or otherwise. The questions are carefully designed to ensure accurate and reliable information from the participants, who are often leaders in their fields or have deep knowledge of the subject matter.

This approach aims to achieve scientific results and generalizations that meet the study's objectives and answer its questions, providing a clear and accurate understanding and a more comprehensive picture of the phenomenon under study to answer the study's questions and reach precise results. Quantitative research is defined as: 'A type of scientific research that assumes the existence of objective social facts, isolated from individuals' emotions and beliefs. It often relies on statistical methods for data collection and analysis. (Kandilji and Al-Samarrai, 2009).

Qualitative research: is a type of scientific research that assumes the existence of social facts and phenomena constructed through the perspectives of individuals and groups participating in the study. (Kandiljiu Al-Samarrai, 2009).

3.4 Study Population and Sample

The study population is defined by all the terms that represent the phenomenon under investigation, and have common characteristics about which data collection is required. (Al-Bayati, 2018).

The study community consists of experts in political science, sociology, economics, representatives from civil society, and decision-makers in various districts of the West Bank and also among the Diaspora. The researcher has chosen a purposive sample from the study community based on expertise and specialization. A purposive sample is a non-probability sample that researchers use when the study community is not sufficiently large, while specific characteristics are desired in its members. The researcher made this choice because those interested in future studies or related fields can be considered relatively few within the Palestinian theoretical and practical domains.

The purposeful sample (also known as non-probability sampling): is a branch of sampling methods that uses non-random techniques to select a group of individuals for participation in research. It's important to note that purposive sampling does not focus on precise representation of all members from a large population within a smaller sample group of participants, and as a result. (Qualtrics, 2022).

3.5 The sample of study

The sample refers to the vocabulary through which study information is collected. It constitutes a limited part or number of the total vocabulary of the study community under investigation. The sample must be accurately representative of this community, and it

should be chosen appropriately for conducting the study in order to extract study results and generalize them to the entire research community. (Al-Khader and Al-Khalil, 2020).

The study sample consisted of (32) experts in political science, sociology, economics, and representatives of civil society and decision-makers. The sample was selected based on specific criteria related to the study, including expertise and specialization.

3.6 Instruments of the study

The success of any scientific research depends on the appropriate selection of research instruments. These instruments serve the study under preparation, facilitating data collection, organization, analysis, visualization, and dissemination of research or study result. (Al-Mashhadani, 2017).

There are two types of data that the researcher must collect in order to achieve the objectives of their study: primary data and secondary data. Below is a review of the methods the researcher used for data collection:

1. **Primary Data** This data was collected by the researcher from the study sample using an elite opinion survey form for experts (opinion poll). The questionnaire was developed based on previous studies, the study's objectives, and its questions. The elite opinion poll is one of the data collection methods in scientific research that relies on converting the study topic into variables and expressing these variables through indicators measured by paragraphs and questions. Each question has one or more specific objectives related to different aspects of the study.

The researcher chose this method for data collection because it is characterized by saving time, effort, and cost. Additionally, it allows for systematic elicitation of responses from the study sample, enabling them to provide their insights and opinions on the phenomenon without direct intervention from the researcher. (Issa and Abdul Raouf, 2017).

2. Secondary data: By examining the research and studies conducted by others in relevant fields, as well as scientific and theoretical books and publications related to the dimensions, variables, and topics of the study, in addition to reviewing peer-reviewed scientific journals and published and unpublished research that discusses the current study's concepts and previous Palestinian development plans, to build a theoretical framework for your study.

Based on secondary sources for data collection, and considering the research problem, study objectives, and research questions, the researcher developed a survey questionnaire for opinions. The questionnaire (Opinion poll) was divided as follows:

1. Primary Data (Demographics): This includes general information about the respondents, such as their name, educational qualifications, occupation, and geographic location.
2. Axis 1: It includes a set of questions that employed a classification-style approach for quantitative data collection. These questions measure several political, social, economic, environmental, and technological indicators.
3. Axis 2: It includes a set of questions that employed an open-ended approach for qualitative data collection regarding the future development prospects in Palestine

3.7 Distribution of the Study Sample

By collecting data from the study sample and based on demographic variables, the distribution of the study sample was as follows:

1. According to educational qualifications: The highest percentage in the study sample holds a doctoral degree, constituting (71.8%) of the sample. The lowest percentage is for those with a bachelor's degree, at (6.45%), while those with a master's degree make up 21.8% of the study sample. The sample was selected based on expertise and specialization, including those engaged in scientific research.

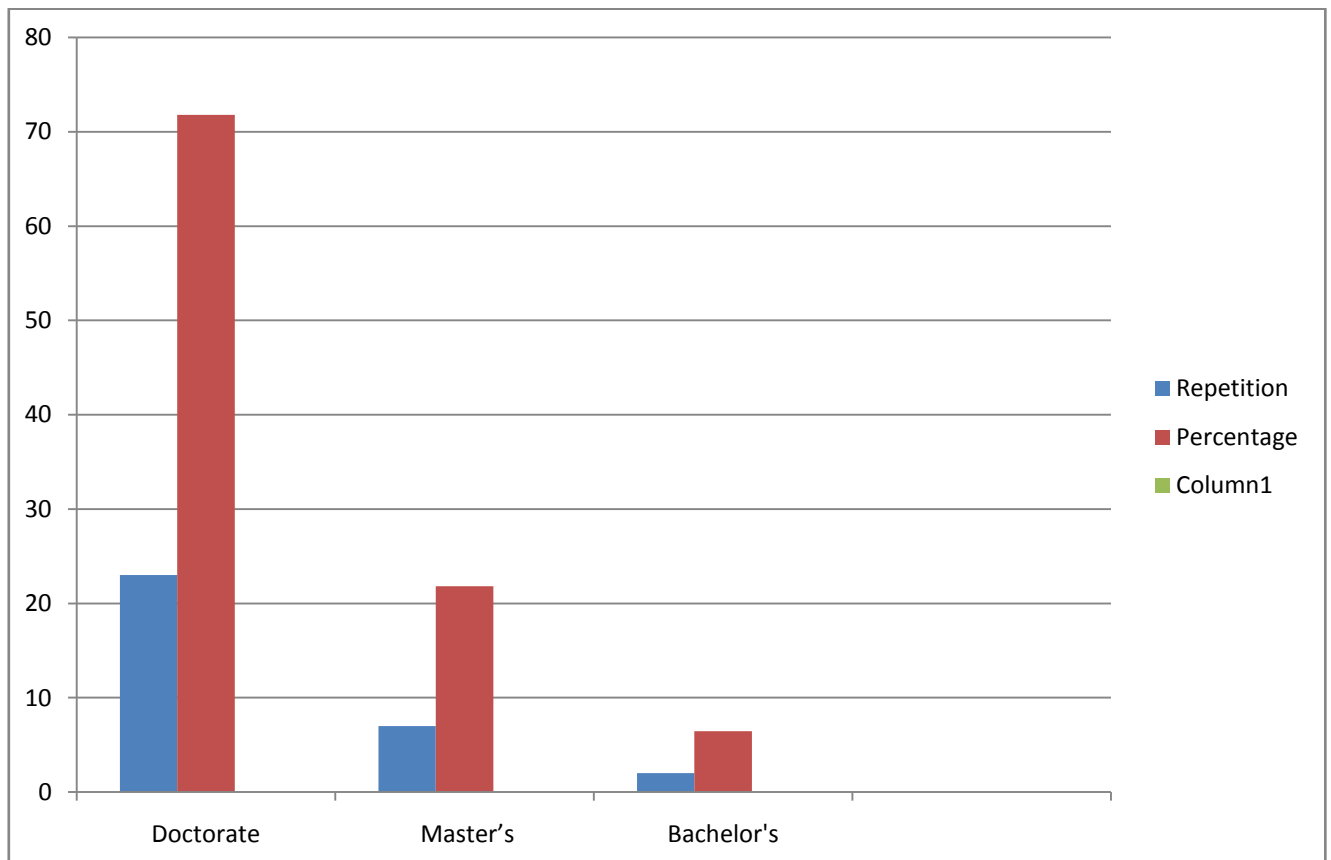


Figure 4 Characteristics of the study sample according to the Scientific Qualification

2. According to geographical region: The highest percentage was in the province of Nablus, accounting for (28.1%) of the study sample. The lowest percentage was among migrants

(Canada), constituting (3.1%) of the study sample.

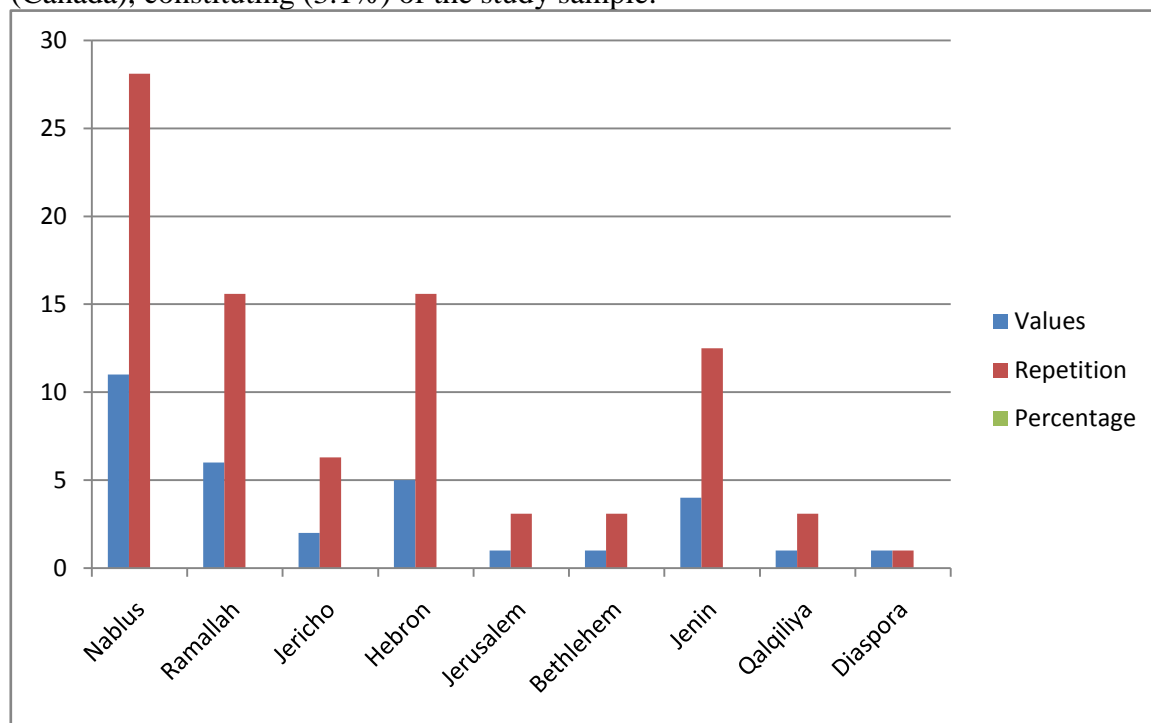


Figure 5 shows Characteristics of the study sample according to the Geographical Region

Chapter Four

Data analysis, Results and Conclusions

4.1 Introduction

This chapter includes a presentation of the study's data analysis results. The first section deals with the analysis of the elite opinion survey results for the study sample, where the researcher presented the data in tables to review the main findings of the elite opinion survey form. The second section addresses the use of future studies techniques to analyze the elite opinion survey data in a way that serves to answer the study's questions and objectives

4.2 Analysis of the elite opinion survey form

Q1: What are the most important indicators for understanding the reality of life in the West Bank currently?

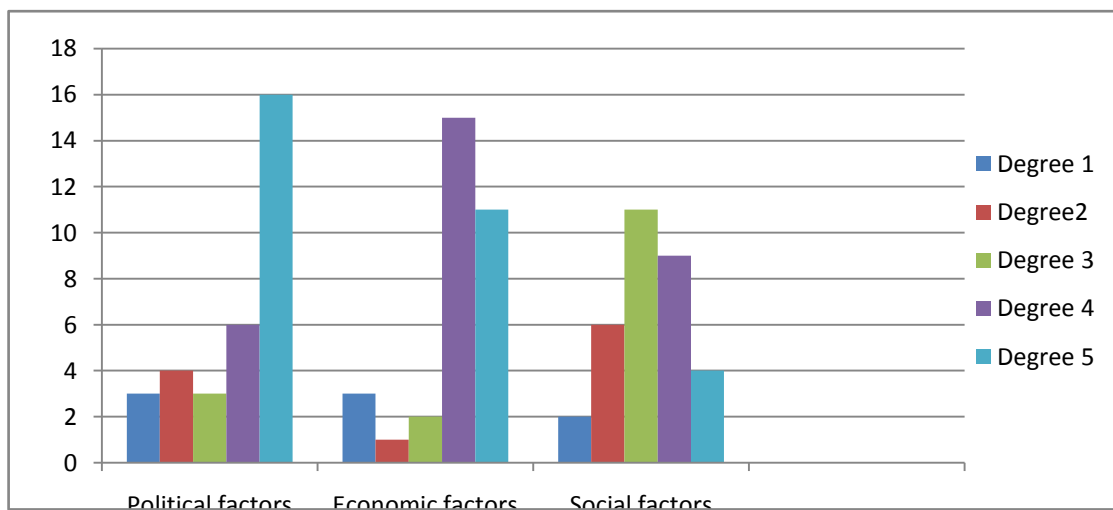


Figure 6 Shows Developmental Factors

❖ Analysis:

1. Political Factors:

The majority of responses are concentrated at degree 5 (16 occurrences), indicating that political factors are considered highly influential in the current context.

Lower degrees (1, 2, and 3) have fewer occurrences, suggesting that while political factors are recognized, their impact is not uniformly severe across all respondents.

2. Economic Factors:

The highest concentration is at degree 4 (15 occurrences), followed by degree 5 (11 occurrences). This suggests that economic factors are also seen as highly influential, but with a slightly more balanced distribution compared to political factors.

Lower degrees (1, 2, and 3) have minimal occurrences, indicating that economic challenges are predominantly seen as significant.

3. Social Factors:

The majority of responses are concentrated at degree 3 (11 occurrences), indicating that social factors are considered to have a moderate impact. They are the least influential among the other factors.

The distribution is varied across different degrees, reflecting diverse perspectives on the impact of social factors.

❖ Conclusions:

- Political factors are considered the most influential on the current reality in the West Bank, with most respondents viewing them as highly impactful.
- Economic factors are the second most influential, with a significant concentration at higher degrees.
- Social factors are seen as having a moderate impact, with varied views on their significance.

Q2: Which of the following factors is the most influential?

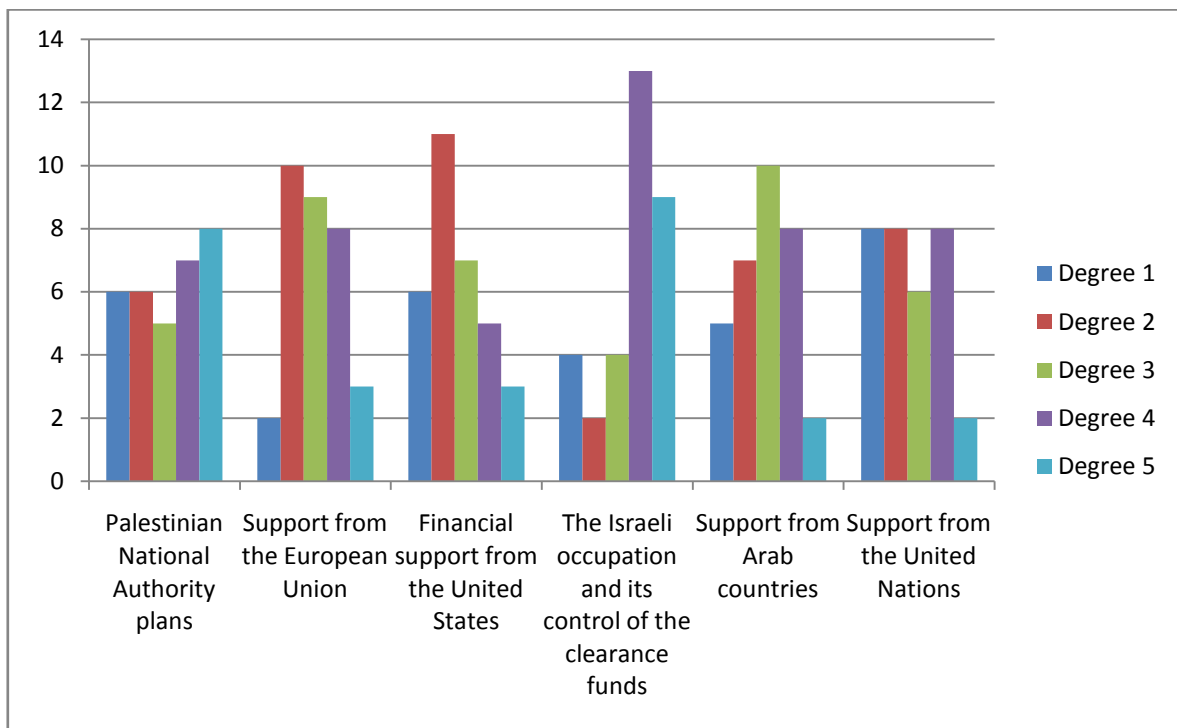


Figure 7 Shows Different Economic Factors

Analysis:

1. Palestinian National Authority Plans: The frequencies range from 5 to 8, indicating that this factor is considered moderately to highly influential by the experts.
2. Support from the European Union: This factor shows significant variability, with frequencies ranging from 2 to 10, suggesting that experts have mixed opinions on its influence.
3. Financial Support from the United States: This factor shows strong influence initially (11) but gradually decreases to 3, indicating that experts believe its influence has diminished over time.
4. The Israeli occupation and Its Control of the Clearance Funds: This factor shows a significant increase in influence in the fourth frequency (13) but slightly decreases in the fifth frequency (9), indicating that it is considered highly influential by the experts.
5. Support from Arab Countries: This factor shows variability, with frequencies ranging from 2 to 10, suggesting that experts have mixed opinions on its influence.
6. Support from the United Nations: This factor shows relatively stable influence, with frequencies ranging from 6 to 8, indicating that experts consider it moderately influential.

Conclusions:

Based on these frequencies, it can be concluded that the Israeli occupation and its control of the clearance funds is the most influential factor in the fifth frequency (9), and especially in the fourth frequency where it received the highest score (13). This is followed by the Palestinian National Authority (development plans) in the fifth frequency (8), and financial

support from the United States in the second frequency (11), and then support from the European Union in the second frequency (10).

Q3 Which of the following economic factors is the most influential in future scenarios?

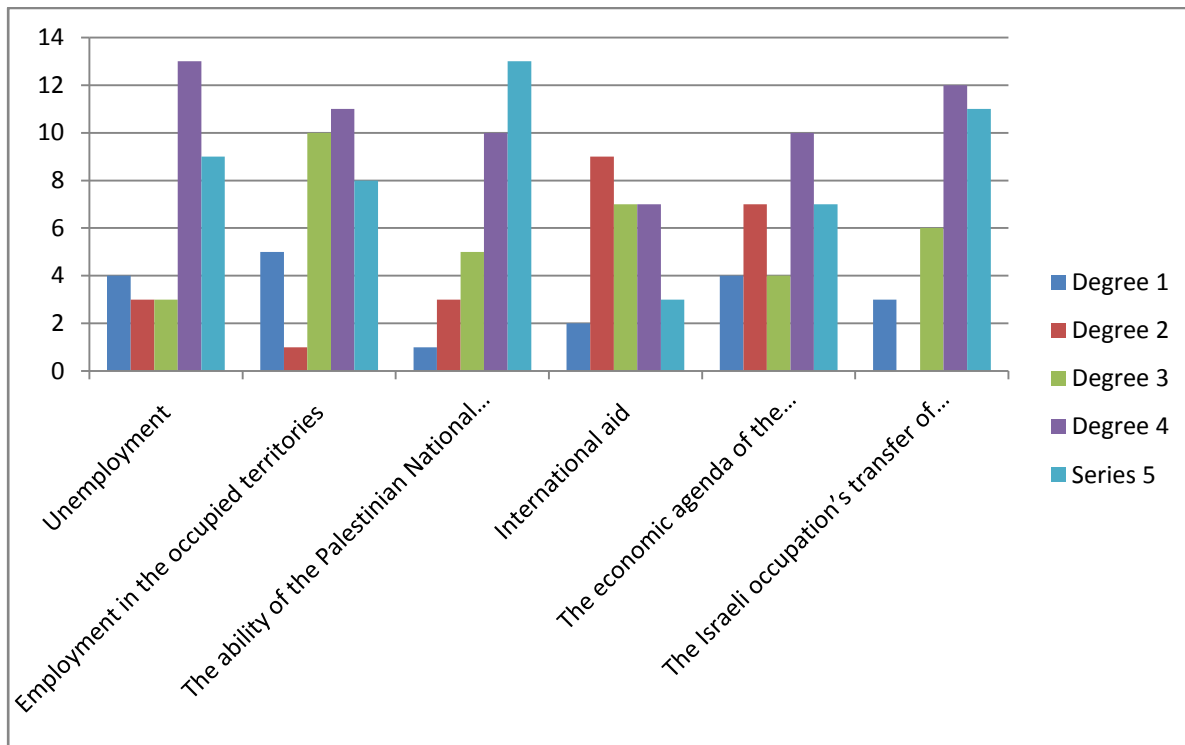


Figure8 Shows Economic Indicators

Analysis:

1. Unemployment:

- Received a score of 5 in 9 instances, indicating it is among the most important factors.
- Received a score of 4 in 13 instances, further emphasizing its significance.

This suggests that unemployment is a highly influential factor in future scenarios.

2. Employment in the occupied territories:

- Received a score of 5 in 8 instances, indicating its importance.
- Received a score of 4 in 11 instances, reinforcing its role.

This suggests that employment in the occupied territories is an important factor but less influential than unemployment.

3. The ability of the Palestinian National Authority to pay salaries:

- Received a score of 5 in 13 instances, making it one of the most important factors.
- Received a score of 4 in 10 instances, further emphasizing its significance.

Therefore, this factor is considered crucial in future scenarios.

4. International aid:

- Received a score of 5 in only 3 instances, indicating it is less important compared to other factors.
- Received a score of 4 in 7 instances, reinforcing its role but to a lesser extent.

5. The economic agenda of the Palestinian National Authority:

- Received a score of 5 in 7 instances, indicating moderate importance.
- Received a score of 4 in 10 instances, reinforcing its role.

6. The Israeli occupation's transfer of clearance funds:

- Received a score of 5 in 11 instances, indicating significant importance.
- Received a score of 4 in 12 instances, further emphasizing its role.

❖ Conclusions:

Based on this analysis, we can conclude that the ability of the Palestinian National Authority to pay salaries and The Israeli occupation's transfer of clearance funds are the most influential factors in future scenarios, followed by unemployment and employment in the occupied territories.

Q.4 Which of the following social factors has the most impact on the future of Palestinian society?

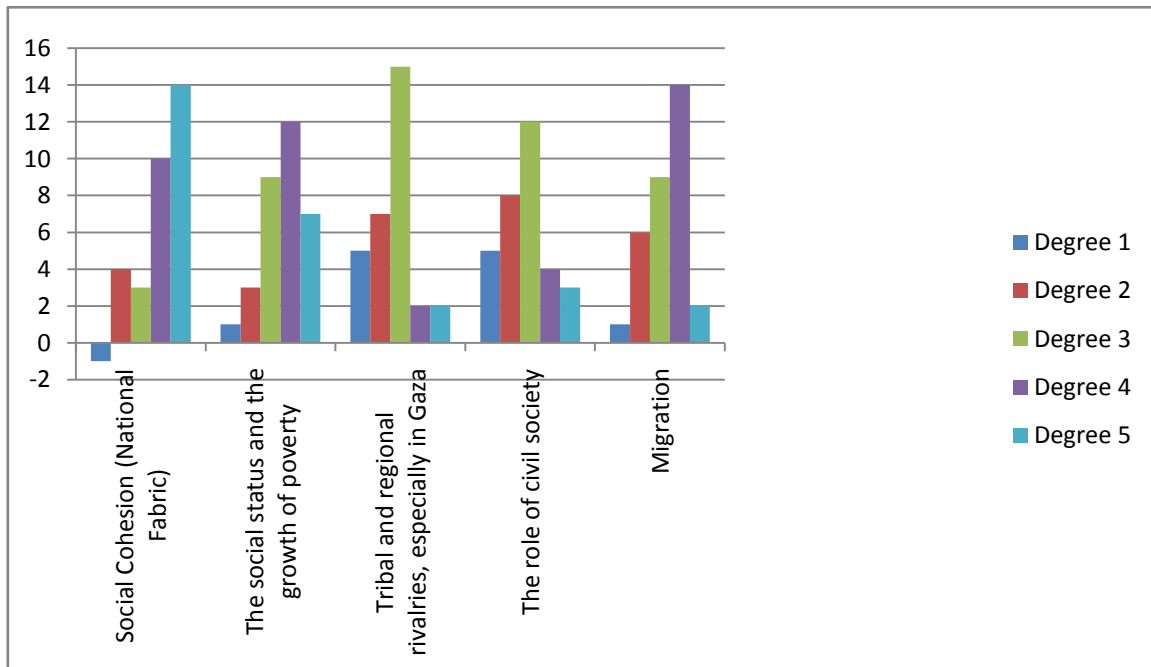


Figure 9 shows social Factors

Analysis:

1. Social Cohesion (National Fabric):

This factor received the highest score (14) in category 5, indicating it is the most important. Social cohesion plays a crucial role in the stability of society and the enhancement of national unity, making it a decisive factor in the future of Palestinian society.

2. Social Status and the Growth of Poverty:

This factor received a high score (12) in category 4, indicating significant importance. Poverty directly affects the quality of life and the opportunities available to individuals, thus impacting social and economic development.

3. Tribal and Regional Rivalries, Especially in Gaza:

This factor received the highest score (15) in category 3, indicating moderate importance. Tribal and regional rivalries can lead to divisions within society and affect social stability.

4. The Role of Civil Society:

This factor received a high score (12) in category 3, indicating moderate importance. Civil society plays an important role in promoting community participation and defending individual rights, contributing to a more cohesive and just society.

5. Migration:

This factor received a high score (14) in category 4, indicating significant importance. Migration affects the demographic composition and leads to changes in social and economic dynamics.

❖ Conclusions:

Based on these analyses, it can be concluded that social cohesion is the most impactful factor on the future of Palestinian society, followed by social status and the growth of poverty and migration. These three factors play a crucial role in shaping the future of Palestinian society and determining the path of social and economic development.

Q.5 What is the probability of the following options occurring?

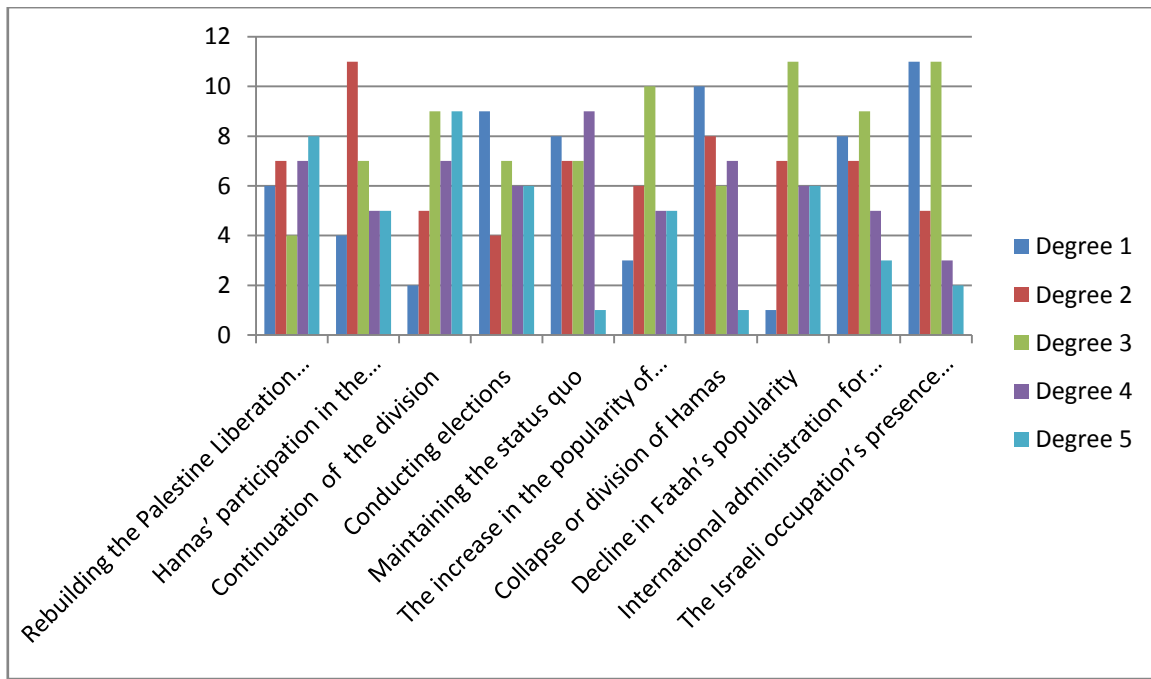


Figure 10 Shows the Probability of some Predicted Options Occurring.

Analysis:

1. Rebuilding the Palestine Liberation Organization (PLO)

The probabilities range from 4 to 8, with a higher concentration around 7 and 8. This suggests a moderate to high likelihood of the PLO being rebuilt.

2. Hamas' Participation in the Liberation Organization

The probabilities are more varied, with a peak at 11 in the second degree. This indicates a significant uncertainty but a notable possibility of Hamas participating in the PLO.

3. Continuation of the Division

The probabilities range from 2 to 9, with higher values at 9. This suggests a moderate to high likelihood of the division continuing.

4. Conducting Elections

The probabilities are fairly consistent, ranging from 4 to 9, indicating a moderate likelihood of elections being conducted.

5. Maintaining the Status Quo

The probabilities are mostly high, with a peak at 9, suggesting a high likelihood of maintaining the current situation.

6. Increase in the Popularity of Hamas

The probabilities range from 3 to 10, with a peak at 10. This indicates a moderate to high likelihood of Hamas gaining popularity.

7. Collapse or Division of Hamas

The probabilities are varied, with a peak at 10, suggesting a moderate likelihood of Hamas collapsing or dividing.

8. Decline in Fatah's Popularity

The probabilities range from 1 to 11, with a peak at 11, indicating a high likelihood of Fatah's popularity declining.

9. International Administration for Gaza

The probabilities range from 3 to 9, with higher values at 7 and 9, suggesting a moderate likelihood of international administration being established in Gaza.

10. The Israeli occupation's Presence in Gaza

The probabilities range from 2 to 11, with peaks at 11, indicating a high likelihood of Israel maintaining a presence in Gaza.

- Conclusions:

Based on these analyses, it can be concluded that there is a high probability of maintaining the status quo, a decline in Fatah's popularity, and the Israeli occupation's continued presence in Gaza. There is also a significant likelihood of Hamas gaining popularity and participating in the PLO, although there is considerable uncertainty in these areas. Also the responses indicate that all the possibilities for the presented options are open and feasible. The degree (3) is the most frequent in terms of likelihood, suggesting a state of uncertainty and that all options are open for shaping the future.

4.2 Analysis Techniques

There is a connection between the study's objective and the choice of the appropriate technique, and most future studies tend to link goals with techniques.

4.2.1 The cross-impact matrix

It is an illustrative technique used to identify risks and develop appropriate plans for managing them. This matrix relies on estimating the probability of risk occurrence and evaluating its impact. By plotting risks on this matrix, can prioritize their responses based on severity and likelihood.(Majara, 2021).

The analysis involves comparing the basic variables in a phenomenon and then observing the extent to which each variable affects and is affected by the other variables reciprocally. It is a method of studying the impact that variables or components, which form a certain system, have on other variables, components, or other corresponding things, whether negatively or positively, while also receiving external influences from other variables, components, or things themselves, whether negatively or positively.

In light of the current events, the aggression on Gaza is the main axis affecting various political, economic, and social aspects, making it a vital topic that must be analyzed to understand the challenges facing the region in general and Palestine in particular. This is an attempt to explore the mutual influences between political, economic, and social factors to provide a comprehensive vision that helps in understanding the dimensions of the current situation and highlighting the interactions and impacts that reflect on the reality of development in Palestine

This matrix aims to identify the most influential factors, the most affected factors, and the degree of influence and impact (related to the effects of the aggression on Gaza).

Table1 Shows Political Factors

Impact	External polices				Internal polices					Political Factors
	American elections	occupation's internal	Decline	Palestinian cause as	Vision for both Fatah and Hamas about what comes	Palestinian Liberation	increased empathy with Hamas	Palestinian National Authority and the erosion of the	Division	
2	3-	4	3	4	3-	3-	4	4-	0	Division
-12	1-	2	4-	2-	4-	3-	4	0	4-	The decline of the credibility of the Palestinian National Authority and the erosion of the political system
7	0	3	2	3-	2-	3	0	2	2	Increased empathy with Hamas
										Increased empathy with Hamas
-15	1-	3-	2-	2-	3-	0	3	4-	3-	The sagging of the Palestinian Liberation Organization
14-	1-	1-	3	1-	0	4-	2-	5-	5-	The lack of a clear Vision for both Fatah and Hamas about what

										comes after the aggression
13	1	3	2	0	2-	2	3	2	2	The return of the Palestinian cause as a priority
14	1	3	0	3	1-	2	2	2	2	Normalization Decline
15	2	0	3	4	2	1	1	1	1	The Israeli occupation's internal and external dilemma
2	0	1	2	2	3-	1-	1	1-	1	American elections
	4-	7-	16	3-	16-	4	9	17	3-	Total Impact

Analysis:

1. Division:

Division has a mixed impact: it negatively affects the decline of the credibility of the Palestinian National Authority and the erosion of the political system (-4), the sagging of the Palestinian Liberation Organization (-3), and the lack of a clear vision for both Fatah and Hamas (-3). However, it positively impacts increased empathy with Hamas (4), the return of the Palestinian cause as a priority (4), normalization decline (3), The Israeli occupation's internal and external dilemma (4), and American elections (2). The total impact of division is 2.

2. The decline of the credibility of the Palestinian National Authority and the erosion of the political system:

This factor negatively impacts division (-4), the sagging of the Palestinian Liberation Organization (-3), the lack of a clear vision for both Fatah and Hamas (-4), normalization decline (-2), and The Israeli occupation's internal and external dilemma (-4). It positively impacts increased empathy with Hamas (4) and American elections (2). The total impact is -12.

3. Increased empathy with Hamas:

Increased empathy with Hamas positively impacts division (2), the decline of the credibility of the Palestinian National Authority and the erosion of the political system (2), the sagging of the Palestinian Liberation Organization (3), normalization decline (2), The Israeli occupation's internal and external dilemma (3), and American elections (0). It negatively impacts the lack of a clear vision for both Fatah and Hamas (-2) and the return of the Palestinian cause as a priority (-3). The total impact is 7.

4. The sagging of the Palestinian Liberation Organization:

This factor negatively impacts division (-3), the decline of the credibility of the Palestinian National Authority and the erosion of the political system (-4), the lack of a clear vision for both Fatah and Hamas (-3), normalization decline (-2), and The Israeli occupation's internal and external dilemma (-3). It positively impacts increased empathy with Hamas (3) and American elections (-1). The total impact is -15.

5. The lack of a clear vision for both Fatah and Hamas about what comes after the aggression:

This factor negatively impacts division (-5), the decline of the credibility of the Palestinian National Authority and the erosion of the political system (-5), increased empathy with Hamas (-2), the sagging of the Palestinian Liberation Organization (-4), normalization decline (-1), and American elections (-1). It positively impacts The Israeli occupation's internal and external dilemma (3). The total impact is -14.

6. The return of the Palestinian cause as a priority:

This factor positively impacts division (2), the decline of the credibility of the Palestinian National Authority and the erosion of the political system (2), increased empathy with Hamas (3), the sagging of the Palestinian Liberation Organization (2), normalization decline (2), The Israeli occupation's internal and external dilemma (3), and American elections (1). It negatively impacts the lack of a clear vision for both Fatah and Hamas (-2). The total impact is 13.

7. Normalization Decline:

Normalization decline positively impacts division (2), the decline of the credibility of the Palestinian National Authority and the erosion of the political system (2), increased empathy with Hamas (2), the sagging of the Palestinian Liberation Organization (2), the return of the Palestinian cause as a priority (3), The Israeli occupation's internal and external dilemma (3), and American elections (1). It negatively impacts the lack of a clear vision for both Fatah and Hamas (-1). The total impact is 14.

8. The Israeli occupation's internal and external dilemma:

This factor positively impacts division (1), the decline of the credibility of the Palestinian National Authority and the erosion of the political system (1), increased empathy with Hamas (1), the sagging of the Palestinian Liberation Organization (1), the return of the Palestinian cause as a priority (4), normalization decline (3), and American elections (2). It negatively impacts the lack of a clear vision for both Fatah and Hamas (-1). The total impact is 15.

9. American elections:

American elections positively impact division (1), increased empathy with Hamas (1), the return of the Palestinian cause as a priority (2), normalization decline (2), and The Israeli occupation's internal and external dilemma (1). It negatively impacts the decline of the credibility of the Palestinian National Authority and the erosion of the political system (-1), the sagging of the Palestinian Liberation Organization (-1), and the lack of a clear vision for both Fatah and Hamas (-3). The total impact is 2.

❖ Conclusions:

1. The Israeli occupation's internal and external dilemma is the most positively impactful factor with a total of 15.
2. The sagging of the Palestinian Liberation Organization (PLO) is the most negatively impactful factor, with a total of -15. This suggests that the weakening of the PLO significantly harms the Palestinian political landscape by exacerbating internal divisions,

diminishing credibility, and reducing political cohesion, while offering only marginal benefits to alternative factions like Hamas.

3. Normalization decline and the return of the Palestinian cause as a priority follow with total positive impacts of 14 and 13, respectively.
4. The sagging of the Palestinian Liberation Organization and the lack of a clear vision for both Fatah and Hamas are the most negatively impactful factors with totals of -15 and -14, respectively.
5. The internal division seems to have a strong negative impact on many aspects, including the decline in the credibility of the Palestinian National Authority and the political system, and its negative impact on Fatah and Hamas movements.
6. Increased sympathy with Hamas seems to have a positive impact on many aspects, including increased sympathy with Hamas itself and its impact on normalization and the Palestinian issue.
7. The return of the Palestinian issue as a priority shows a positive impact on many aspects as well, including increased sympathy with Hamas and the decline of normalization

Table2 Shows Economic Factors

Impact	External			Internal				Economic Factors
	Occupation restrictions	Global crises	Decline in international financial support	weak investment	Decline in the Palestinian National authority's income	Unemployment	Poverty	
-17	3-	2-	3-	3-	3-	3-	0	Poverty
-13	4-	2-	2-	2-	3-	0		Unemployment
-19	4-	3-	4-	2-	0	3-	3-	Decline in the Palestinian National Authority's income
-11			3-	0	2-	3-	3-	weak investment
-17	3-	3-	0	3-	2-	3-	3-	Decline in international financial support
-15	3-	0	3-	2-	2-	2-	3-	Global crises
-22	0	3-	3-	4-	4-	4-	4-	Occupation restrictions
	17-	13-	18-	15-	16-	20-	16-	Impact/Total

Analysis:

Poverty:

Poverty has a negative impact on unemployment (-3), the decline in the Palestinian National Authority's income (-3), weak investment (-3), the decline in international financial support (-3), global crises (-2), and occupation restrictions (-3). The total negative impact of poverty is -17.

Unemployment:

Unemployment negatively affects the decline in the Palestinian National Authority's income (-3), weak investment (-2), the decline in international financial support (-2), global crises (-2), and occupation restrictions (-4). The total negative impact of unemployment is -13.

Decline in the Palestinian National Authority's income:

This factor negatively impacts poverty (-3), unemployment (-3), weak investment (-2), the decline in international financial support (-4), global crises (-3), and occupation restrictions (-4). The total negative impact is -19.

Weak investment:

Weak investment negatively impacts poverty (-3), unemployment (-3), the decline in the Palestinian National Authority's income (-2), and the decline in international financial support (-3). The total negative impact is -11.

Decline in international financial support:

This factor negatively impacts poverty (-3), unemployment (-3), the decline in the Palestinian National Authority's income (-2), weak investment (-3), global crises (-3), and occupation restrictions (-3). The total negative impact is -17.

Global crises:

Global crises negatively impact poverty (-3), unemployment (-2), the decline in the Palestinian National Authority's income (-2), weak investment (-2), the decline in international financial support (-3), and occupation restrictions (-3). The total negative impact is -15.

Occupation restrictions:

Occupation restrictions have the most significant negative impact on all other factors: poverty (-4), unemployment (-4), the decline in the Palestinian National Authority's income (-4), weak investment (-4), the decline in international financial support (-3), and global crises (-3). The total negative impact is -22.

Conclusions:

Occupation restrictions are the most negatively impactful factor on the other economic factors with a total of -22.

Decline in the Palestinian National Authority's income, poverty, and decline in international financial support follow with total negative impacts ranging from -17 to -19.

Weak investment is the least negatively impactful factor with a total of -11.

This table shows that occupation restrictions and the decline in the Palestinian National Authority's income are the most influential factors on the economic situation in Palestinian society.

In short, the table reflects a variety of challenges and factors that affect the economic, social, and political situation, which can guide decision-making and policy setting

Table3 Shows Social Factors

Total Impact	External		Internal				Social Factors
	popular solidarity	financial transfers	external and migration	Local societal forces	popular organizations	Tearing of the social fabric	
-13	2-	2-	3-	3-	3-	0	Tearing of the social fabric
-7	3	1-	3-	3-	0	3-	The role of popular organizations
-7	1-	1-	1-	0	2-	2-	Local societal forces

-8	2-	1-	0	1-	2-	2-	Internal and external migration
-9	2-	0	1-	2-	2-	2-	Decline in family financial transfers
-4	0	0	2-	2-	2	2-	International popular solidarity
	4-	5-	10-	11-	7-	11-	Total Impact

Analysis:

1. Tearing of the Social Fabric:

- Internally: No internal impact (0).
- Externally: Significant negative impact (-3).
- Overall Impact: -13, indicating a substantial negative impact on society.

2. The Role of Popular Organizations:

- Internally: Significant negative impact (-3).
- Externally: Significant negative impact (-3).
- Overall Impact: -7, indicating a noticeable negative impact.

3. Local Societal Forces:

- Internally: Moderate negative impact (-2).

- Externally: Moderate negative impact (-2).
- Overall Impact: -7, indicating a noticeable negative impact.

4. Internal and External Migration:

- Internally: Moderate negative impact (-2).
- Externally: Moderate negative impact (-2).
- Overall Impact: -8, indicating a significant negative impact.

5. Decline in Family Financial Transfers:

- Internally: Moderate negative impact (-2).
- Externally: Moderate negative impact (-2).
- Overall Impact: -9, indicating a substantial negative impact.

6. International Popular Solidarity:

- Internally: Moderate negative impact (-2).
- Externally: Moderate positive impact (2).
- Overall Impact: -4, indicating a moderate negative impact.

- Overall Impact:

- Internally: The total impact of all factors is -11, indicating a significant negative impact on society from within.

- Externally: The total impact of all factors is -7, indicating a noticeable negative impact from external sources.
- Total: The overall impact of all factors is -11, indicating a substantial negative impact on society as a whole.

Conclusion:

Based on this table, we can conclude that various social factors negatively affect Palestinian society, both internally and externally. The tearing of the social fabric and the decline in family financial transfers are among the most negatively impactful factors. While international popular solidarity shows a moderate positive impact, it is not sufficient to offset the other negative impacts.

4.2.2 Futures Wheel

It relies on a set of brainstorming mechanisms to identify the first, second, and third-order effects of a phenomenon occurring in the future:

Monitoring the direct effects (Level 1) or the strongly expected reactions following the occurrence of the phenomenon.

Monitoring the indirect effects (Level 2) resulting from the occurrence of Level 1, and so on across multiple levels.

Then, a final review of the overall effects and reactions is conducted.

After that, appropriate decisions are made to exploit the positive effects and avoid the negative effects of the phenomenon.

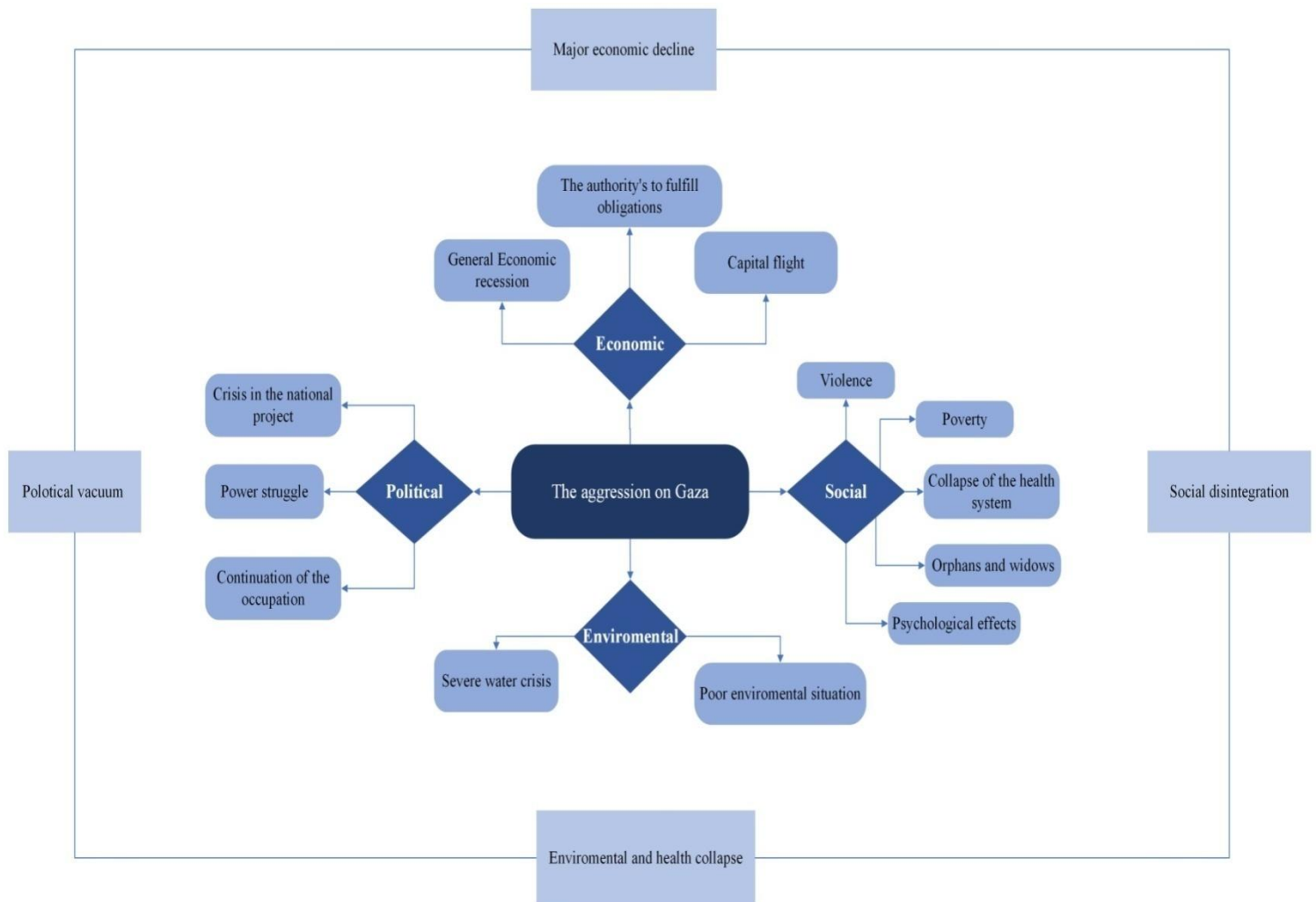


Figure 11) Futures Wheel Analysis: (The Aggression on Gaza)

- Futures Wheel Analysis:
- The Aggression on Gaza
- Direct Implications:
- Political Impact.
- Economic Impact.
- Social Impact.
- Environmental Impact.

Indirect Political Impacts:

- Crisis in the national project.
- Power struggle.
- Continuation of the occupation.

Indirect Economic Impacts:

- The Palestinian National Authority inability to fulfill obligations.
- General economic recession.
- Capital flight.

Indirect Social Impacts:

- Collapse of the health system.
- Psychological effects.
- Poverty.
- Orphans and widows.
- Violence.

Indirect Environmental Implications:

- Severe water crisis.
- Poor environmental situation.

In light of the analysis of the direct and indirect impacts of the aggression on Gaza, we explore a wide range of political, economic, social, and environmental effects. We can conclude the following:

- Political Vacuum: The power struggle, the crisis of the national project, and the continuation of the Israeli occupation can lead to a political vacuum, which further complicates the political situation in the region.
- Continuous Pressure: The ongoing Israeli occupation imposes continuous political and economic pressures on the Palestinian people, hindering any progress or attempts towards stability and peace .
- Economic Decline: The general economic recession, the inability of the Palestinian National Authority to meet its financial obligations, and the flight of capital can lead to a significant economic decline, which will impact the standard of living and development.
- Impact on Investment: The flight of capital can negatively affect investment projects, job opportunities, and overall development, making it more challenging to achieve sustainable economic growth, especially amid unstable political and security indicators.
- Social Disintegration: Increased social tensions can contribute to internal conflicts that affect social cohesion, adding to the challenges faced by Palestinian society.
- Impact on Daily Life: The deterioration of basic services, the collapse of the education system and its impact on the future of children and youth, and the collapse of the healthcare system due to the destruction of hospitals and increased pressure on remaining medical facilities can significantly affect individuals' daily lives, exacerbating their psychological and physical suffering.

Environmental Conclusions:

- Environmental and Health Collapse: The severe water crisis and poor environmental conditions due to water and soil pollution, destruction of vegetation, accumulation of waste,

and air pollution can all lead to a serious and catastrophic environmental and health collapse, increasing the long-term health and environmental challenges faced by the population.

4.2.3 Scenarios

A scenario is a description or visualization of a possible, probable, or desirable future situation, with an explanation of the path or paths that could lead to this future situation. Scenarios are typically used to explore different future possibilities and determine how to effectively deal with them. (Aouissi, 2018).

In scenario planning, different scenarios are developed based on various assumptions and uncertainties. These scenarios help decision-makers anticipate and prepare for different possible futures.

It's a valuable tool for strategic planning, especially in complex and uncertain environment.

Table4 shows the Scenarios

Implications of the major trend for the factors affecting the scenario	Probability					Scenario
	5	4	3	2	1	
(1) the least likely - (5) the most likely						
All indicators point to this (occupation plans, number of settlers, demographic and geographic changes in Jerusalem)	5					The occupation remains for a long period
The position of the Palestinian National Authority and Hamas will not change for a long time, and the behavior of indicators towards more division is increasing		4				Continuation of the division and control of Hamas
After the aggression of October 7, the majority of the Hamas movement increased as most opinion polls indicate.		4				Weak Hamas under Arab guardianship

This perspective is in the policy of the Israeli occupation government.			3			The complete separation of the Gaza Strip from the West Bank and artificial rule
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In light of the data collected and analyzed, we present the various and potential scenarios:

1. Long-term occupation: This scenario is considered the most likely with an estimate of (5), and it predicts the continuation of the Israeli occupation for a long period. The implications point to an increase in indicators related to the occupation, such as occupation plans and demographic and geographic changes in Jerusalem.
2. Continuation of the division and control of Hamas: The scenario is estimated with a probability of (4), and it predicts the continuation of the Palestinian division and Hamas control for a long period.
3. The weakness of Hamas under Arab guardianship: The scenario is estimated with a probability of (4), and it predicts that Hamas will remain weak under the influence of Arab support for a long period. The implications point to an increase in Hamas's popularity after the aggression and its increased influence.
4. The Complete separation of the Gaza Strip from the West Bank and artificial rule: The scenario is estimated with a probability of (3), and it predicts the complete separation of

Gaza from the West Bank with the establishment of artificial rule. The implications point to the adoption of this perspective in the Israeli occupation government policy.

❖ The expected impacts of each scenario:

1. Long-term occupation: It is the most likely scenario.
 - Political Impact: Long-term occupation will reinforce the Israeli occupation expansionist policies, thereby increasing tensions with the international community.
 - Social Impact: Increased tensions between the Palestinian population and the Israeli occupation will lead to more violence, displacement, and extermination.
 - Economic Impact: Long-term occupation will further deteriorate economic conditions, leading to higher rates of poverty and unemployment.
2. Continuation of the division and control of Hamas:
 - Political Impact: The continued Palestinian division will weaken the Palestinian position in international negotiations, thereby complicating political solutions.
 - Social Impact: Increased internal tensions between Palestinian factions will lead to a rise in internal violence.
 - Economic Impact: The continued Palestinian division will further deteriorate the economic conditions in Gaza and the West Bank, exacerbating the suffering of the population.
3. The weakness of Hamas under Arab guardianship:

- Political Impact: Arab support may strengthen Hamas's position, but it could also increase tensions with the Palestinian Authority.
- Social Impact: Increased support for Hamas may lead to heightened tensions between different Palestinian factions.
- Economic Impact: Arab support may help improve economic conditions in Gaza, but this support may not be sufficient to achieve long-term stability

4. The Complete separation of the Gaza Strip from the West Bank and artificial rule:

- Political Impact: The complete separation of the Gaza Strip will complicate possible political solutions and increase tensions between Palestinian factions.
- Social Impact: The complete separation of the Gaza Strip may lead to increased tensions between the residents of Gaza and the West Bank, raising the likelihood of violence.
- Economic Impact: The complete separation of the Gaza Strip may further deteriorate economic conditions in Gaza, exacerbating the suffering of the population and complicating development efforts.

These four scenarios highlight a range of future possibilities that the region may face. By analyzing these scenarios, decision-makers can develop effective and appropriate strategies to address potential and possible challenges. They can also take proactive measures and create plans to deal with scenarios that may arise amid unstable political, economic, and social conditions.

The impact of the mentioned scenarios on development in Palestine can vary according to the actual nature of each scenario and the implications it brings with it.

1. Long-term occupation: In this scenario, the impact on development may be negative due to the continuation of restrictions and obstacles imposed by the occupation on the Palestinian economy. The occupation may increase the difficulties in obtaining the necessary resources for development, and reduce investment and economic growth opportunities
2. Continuation of the division and control of Hamas: The continuation of the division and increasing frictions between the Authority and Hamas could hinder development efforts. Investments and developmental projects may be affected by violence and political instability, reducing opportunities for sustainable development.
3. Weak Hamas under Arab guardianship: If Hamas's popularity increases after the aggression and its influence increases, opportunities for development in the Gaza Strip may improve, especially if Arab support is directed to support development projects and reconstruction.
4. The Complete separation of the Gaza Strip from the West Bank and artificial rule: In this scenario, the challenge to achieve development in Gaza may increase due to political and economic division. The separated areas may suffer from a lack of resources and services, hindering developmental efforts.

In general, political and economic conditions play a crucial role in achieving development, and therefore, they significantly impact the possibility of achieving development in

Palestine. Consequently, it is important to take all necessary and available measures to enhance political and economic stability, provide full support for sustainable development projects, and work on improving the investment environment and encouraging it to enhance growth and development opportunities in the region.

Based on all the above, we conclude that:

- All scenarios are possible and likely, and no scenario can be favored over another or predicted due to the instability of political, economic, and social indicators. This means that all options and possibilities are likely to occur.
- The continuation of the war on the Gaza Strip, rapid developments, and the instability of political, economic, and social indicators make it difficult to determine the most probable scenario.
- There is extreme difficulty in building a developmental model at this stage due to the instability of political, economic, and social indicators, and the impact of the external environment on local indicators. The instability has increased significantly during the war on Gaza compared to before.
- The preferred scenario of establishing a Palestinian state is unlikely to occur in the foreseeable future, as all indications and evidence suggest this.

4.3 Artificial intelligence role in strategic planning and foresight.

In light of the previous conclusions, it becomes clear to us the importance of using artificial intelligence in strategic planning and foresight techniques. Leveraging the immense capabilities of artificial intelligence can be beneficial for decision-makers and future

planners. It allows directing efforts and decisions toward sustainable and beneficial directions for Palestine based on long-term visions. This is achievable through its ability to:

1. Data Analysis and Pattern Recognition

Artificial intelligence has the capability to analyze vast amounts of data, detecting trends, patterns, and anomalies that may not be immediately apparent. By processing historical data and real-time information, AI can identify emerging trends in politics, economics, security, or social issues, which are crucial for making informed strategic decisions.

- Example: AI-driven tools like predictive analytics can help governments and organizations anticipate shifts in public opinion, economic conditions, or political stability, enabling them to proactively adjust policies or business strategies.

2. Scenario Planning and Simulation

Different AI models can simulate a variety of scenarios based on historical data, current events, and potential future developments. These simulations help organizations test different strategic options under various conditions and understand the potential challenges of different choices.

- Example: In defense and security sectors, AI can model potential conflict scenarios or geopolitical changes, contributing to better military and diplomatic preparedness.

3. Enhanced Decision-Making

AI-powered tools, such as decision support systems, assist leaders by providing data-driven recommendations and minimizing human biases. AI can also suggest optimal courses of action by analyzing multiple variables and scenarios at once, which can be overwhelming for traditional methods.

- Example: In business strategy, AI tools like IBM Watson can analyze market conditions, competitor practices, and consumer behavior to recommend growth strategies, product developments, or market entry.

4. Predictive Analytics for Risk Management

One of the most important contributions of artificial intelligence to strategic foresight is its ability to predict future risks. AI can also process external data such as climate change, financial markets, or social media signals to identify emerging risks, allowing organizations to take proactive action to mitigate them.

- Example: In financial markets, AI models can predict stock trends, detect early signs of market crashes, or forecast regulatory changes that could affect investments.

5. Real-Time Monitoring and Adjustment

AI systems can provide real-time monitoring of both internal operations and external environments. This allows organizations to adjust their strategies immediately based on changing and evolving circumstances. It is particularly useful in dynamic environments, such as global markets or political landscapes, where rapid changes can significantly impact long-term strategies.

- Example: Governments and businesses use AI to monitor cybersecurity threats, supply chain disruptions, or changing global political developments, and adjust strategies in real-time to avoid potential risks or seize new opportunities.

6. Collaboration and Integration

AI can facilitate collaboration among departments or stakeholders by providing centralized platforms to aggregate information from diverse sources. This helps align goals, resources, and strategies, making it

especially valuable in complex, multi-faceted strategic planning, where diverse perspectives and expertise are essential.

7. Example: AI-powered platforms for integrated data visualization can assist senior leaders, officials, and team members across sectors—such as military, diplomacy, or economics—in visualizing and sharing data, thereby enhancing coordination in strategic planning.

8. Automation of Routine Tasks

By automating routine strategic tasks, such as data collection, reporting, or forecasting, AI can free up human resources to focus on high-level decision-making and the development of more innovative strategies. This increases operational efficiency, reduces the likelihood of human error, and accelerates the decision-making process.

- Example: In the corporate world, AI tools can automate market research and competitor analysis, giving strategists more time to focus on innovation and long-term objectives.

❖ Conclusion

- Artificial intelligence offers numerous profound benefits for strategic planning and foresight by enabling faster, more accurate and objective analysis, providing new insights, improving risk and crisis management, and supporting decision-making. However, its full potential can only be realized when paired with human judgment and oversight, particularly when dealing with complex and uncertain future scenarios.
- By leveraging AI in strategic planning, organizations and governments can gain a significant competitive edge, ensuring better preparedness for future challenges and opportunities.

Chapter Five

Recommendations

5.1 Introduction

In this chapter, the results reached will be formulated and translated into recommendations.

5.2 Recommendations:

Based on the study results, the researcher proposes a set of recommendations. Given that the study topic is multidimensional and involves multiple tools, the recommendations will be on several levels:

On a practical level:

1. The necessity of using foresight methods and techniques and benefiting from them in political and economic fields, as they significantly contribute to risk management and can help address social issues such as poverty and unemployment and their future impacts.
2. The importance of decision-makers using foresight methods and techniques, as it is contributing to making informed decisions by analyzing different future scenarios and assessing the potential risks and opportunities associated with each scenario.
3. The necessity for institutions to employ and use integrated technologies between planning, foresight, and artificial intelligence to adapt to future changes, given their ability to provide proactive insights into technological, social, economic, and political developments.

4. The importance of encouraging the use of foresight methods in Innovation due to its ability to identify future trends and emerging technologies that can contribute to the improvement of products and services.
5. Utilizing foresight studies to identify potential future risks and develop effective strategies to mitigate and minimize their negative impact.
6. The necessity for institutions to adopt future planning using the cross-impact matrix and scenarios to improve their efficiency and effectiveness by enhancing resource allocation and directing efforts towards the most promising areas.

At the scientific research level:

- The necessity of developing technologies through the use of various statistical methods and integrating them with applied mathematics and computer science, by automating these technologies to enhance their efficiency.
- Building advanced predictive models through analyzing big data to extract patterns and trends.
- Developing artificial intelligence and deep learning techniques to enhance the accuracy of future predictions.

- The Importance of Utilizing Foresight Techniques and Artificial Intelligence in Scientific Research Across Various Fields:

1. Economics: Analysis of future economic trends and their impact on policies and investments.
2. Health: Using artificial intelligence to predict epidemics and develop rapid response strategies.

3. Environment: Predicting Climate Changes and Their Impact on the Environment, and Developing Strategies to Mitigate Environmental Degradation.

Recommendations for scientific research:

- Using artificial intelligence to predict future technological developments and their impact on various industries and domains.
- Conducting a Study on the Impact of Artificial Intelligence on Culture and Society and How It Can Be Used to Anticipate Future Social and Cultural Changes.
- Developing future studies techniques using big data analytics.
- The Contribution of Artificial Intelligence in Achieving Sustainable Development.
- The uses of artificial intelligence applications and their role in achieving economic and social development.

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Appendices

Appendix (1)

“Opinion Poll in English”

I invite you to participate in a research study focusing on the use of artificial intelligence in strategic planning and foresight techniques: A case study on the development of Palestine under unstable political, economic, and social conditions by filling out an elite opinion survey on the future prospects of development in Palestine.

The study involves completing an elite opinion survey, which takes approximately ten minutes to complete. The survey includes data related to the future prospects of development in Palestine. You will be asked to assign weights from 1 (least important) to 5 (most important) to political, economic, and social indicators, in addition to providing answers to various questions. Please note that the sample for this survey is elite and only includes experts and specialists, and your responses will remain confidential and anonymous.

Thank you for your time and participation in this study.

For the purpose of conducting a scientific study on the future prospects of development in Palestine, and given the importance of involving researchers, academics, experts, and citizens in the research study, please answer the following questions:

1. Name:
2. Academic Qualification:
3. Nature of Work:
4. Geographical Area

Section One: Current indicators

1. What are the most important indicators for understanding the reality of life in the West Bank currently?

Please weigh the following options (Please give a probability score from 1 (least likely) to 5 (most likely)).

Factor	Degree				
	1	2	3	4	5
Political factors					
Economic factors					
Social factors					

2. Please weigh the following options (Please give a probability score from 1 (least likely) to 5 (most likely)).

Factor	Degree				
	1	2	3	4	5
Palestinian National Authority plans					
Support from the European Union					
Financial support from the United States					
The Israeli occupation and its control of the clearance funds					
Support from Arab countries					
Support from the United Nations					

3. Please weigh the following options (Please give a probability score from 1 (least likely) to 5 (most likely)).

Factor	Degree				
	1	2	3	4	5
Unemployment					

Employment in the occupied territories					
The ability of the Palestinian National Authority to pay salaries					
International aid					
The economic agenda of the Palestinian National Authority					
The Israeli occupation's transfer of clearance funds					

4. Please weigh the following options (Please give a probability score from 1 (least likely) to 5 (most likely)).

Factor	Degree				
	1	2	3	4	5
Social Cohesion (National Fabric)					
The social status and the growth of poverty					
Tribal and regional rivalries, especially in Gaza					
The role of civil society					

Migration					
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5. What would happen if.?

Please weigh the following options (Please give a probability score from 1 (least likely) to 5 (most likely)).

Factor	Degree				
	1	2	3	4	5
Rebuilding the Palestine Liberation Organization					
Hamas' participation in the Liberation Organization					
Continuation of the division					
Conducting elections					
Maintaining the status quo					
The increase in the popularity of Hamas					
Collapse or division of Hamas					
Decline in Fatah's popularity					
International administration for Gaza					

The Israeli occupation's presence in Gaza					
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Section Two

1. What would happen if.?

Mention the most important association(s)

Probability	Association
The president's absence	
Separation of the Gaza Strip	
The Israeli occupation's presence in the Gaza Strip	
A Palestinian government without elections	
Hamas' participation in the government and the organization	
Continuation of the war in the Gaza Strip	
Mass migration from Palestine	
Resettlement outside Palestine	
Reoccupation of Palestinian territories	
International forces in Gaza Strip	
Internal conflict in Gaza Strip	
Formation of a government in the Gaza Strip separate from the West Bank	

Settlements remaining in a Palestinian state	
The Jordan Valley remaining under The Israeli occupation's control	
• Emergence or creation of a social force governing Gaza Strip	
Collapse or decline of the Palestinian Liberation Organization (PLO)	
Divisions within Fatah	

Appendix (2)

" استمارة استطلاع الراي باللغة العربية"

أدعو حضرتكم للمشاركة في دراسة بحثية تركز على دراسة استخدام الذكاء الاصطناعي في التخطيط الاستراتيجي وتقنيات الاستشراف: دراسة حالة تنمية فلسطين في ظروف سياسية واقتصادية واجتماعية غير مستقرة من خلال تعبئة استطلاع راي نخبوي حول الافاق المستقبلية للتنمية في فلسطين.

تتضمن الدراسة اكمال استمارة استطلاع راي نخبوي يستغرق إكماله تقريباً (عشرة دقائق)، كما تتضمن الاستمارة بيانات تتعلق بالافاق المستقبلية للتنمية في فلسطين، سيطلب من حضرتكم اعطاء اوزان من (1 اقل اهمية الى 5 اكثر اهمية) لمؤشرات سياسية واقتصادية واجتماعية، بالاضافة الى اعطاء اجابات لاسئلة متنوعة. مع الاشارة الى ان اختيار العينة لهذا الاستطلاع نخبوي وفقط من اصحاب الخبرة والاختصاص ، وستبقى ردودكم سرية ومجهولة المصدر.

شكرا لك على وقتك ومشاركتك في هذه الدراسة.

استمارة استطلاع

بغرض اجراء دراسة علمية حول الافاق المستقبلية للتنمية في فلسطين ، ونظرا لاهمية اشراك الباحثين والاكاديميين والخبراء والمواطنين في الدراسة البحثية نرجو الاجابة على الاسئلة التالية :

1. الاسم :

2. المؤهل العلمي :

3. طبيعة العمل :

4. المنطقة الجغرافية :

القسم الاول : المؤشرات الحالية

1. اي من المؤشرات التالية تعتقد انها الالم حاليا لمعرفة الواقع المعاش في الضفة الغربية ؟ (الرجاء اعطاء اوزان 1 الاقل اهمية 5 الاكثر اهمية).

المؤشر / الالمية	1	2	3	4	5
السياسية					
الاقتصادية					
الاجتماعية					

2. يرجى توزيع المؤشرات لتالية : باعطاء اوزان 1 الاقل اهمية 5 الاكثر اهمية

المؤشر /الاهمية	1	2	3	4	5
خطط السلطة الوطنية					
الدعم من الاتحاد الاوروبي					
الدعم المالي الولايات المتحدة					
اسرائيل وتحكمها بالمقاصة					
دعم الدول العربية					
دعم الامم المتحدة					

3. يرجى توزيع المؤشر التالية: باعطاء اوزان 1 الاقل اهمية 5 الاكثر اهمية

المؤشر /الاهمية	1	2	3	4	5
البطالة					
العمالة في اسرائيل					

					قدرة السلطة على دفع الرواتب
					المساعدات الدولية
					الاجندة الاقتصادية للسلطة الوطنية
					تحويل اسرائيل المقاصة

يرجى توزيع المؤشرات التالية : ء باعطاء اوزان 1 الاقل اهمية 5 الاكثر اهمية

5	4	3	2	1	المؤشر /الاهمية
					التماسك الاجتماعي (النسيج الوطني)
					الحالة الاجتماعية وتنامي الفقر
					النعرات القبلية والجهوية وخاصة في غزة
					دور المجتمع المدني
					الهجرة

5. ماذا سيحدث

يرجى توزيع الخيارات التالية (الرجاء اعطاء درجة احتمالية الحدث 1 الاقل 5 الاكثر)

الخيار /الاهمية	1	2	3	4	5
اعادة بناء منظمة التحرير					
مشاركة حماس في منظمة التحرير					
استمرار الانقسام					
اجراء انتخابات					
بقاء الوضع على ما هو					
تعاضد قوة حماس الشعبية					
انهيار او انقسام حماس					
تراجع شعبية فتح					
ادارة دولية لغزة					
بقاء اسرائيل في غزة					

القسم الثاني

1 . ماذا سيحدث لو ؟

اذكر اهم تداعي / تداعيات

التداعي	الاحتمال
	غياب الرئيس
	انفصال غزة
	بقاء اسرائيل في غزة
	حكومة فلسطينية بدون انتخابات
	مشاركة حماس في الحكومة والمنظمة
	استمرار الحرب في غزة
	هجرة كبيرة من فلسطين
	توطين خارج فلسطين
	اعادة احتلال الاراضي الفلسطينية
	قوات دولية في غزة
	اقتتال داخلي في غزة

	تشكيل حكومة في غزة منفصلة عن الضفة
	بقاء المستوطنات في دولة فلسطينية
	بقاء الاغوار تحت السيطرة الاسرائيلية
	نشوء او خلق قوة اجتماعية تحكم غزة
	انهيار منظمة التحرير او تراجع مكانتها
	انقسامات داخل فتح

الملخص

هدفت هذه الدراسة الى تحديد السيناريوهات المستقبلية للتنمية في فلسطين في ظل ظروف سياسية واقتصادية واجتماعية غير مستقرة، من خلال استخدام تقنيات الاستشراف لبناء وترجيح السيناريوهات المستقبلية وترتيب اولوياتها من خلال تحليل الاتجاهات المحتملة والمستقبلية، واستخدام الذكاء الاصطناعي في التخطيط الاستراتيجي لبناء وتطوير نموذج تنموي يساهم في توجيه الجهود والخطط التنموية نحو اتجاهات مفيدة ومستدامة لمستقبل فلسطين، وتبرز اهمية الدراسة في انها الاولى في فلسطين التي تعمل ضمن بيئة ومؤشرات غير مستقرة يزداد عدم اليقين فيها بشكل كبير يوما بعد يوم، بالتالي النمط التقليدي للدراسات الاستشرافية غير موجود في الدراسة.

تنتمي هذه الدراسة الى حقل الدراسات المستقبلية ذات المنهج متعدد التخصصات القائمة على دراسة الحالة، وقد استخدمت الباحثة اداة استطلاع الراي النخبوي للاجابة على اسئلة الدراسة وتحقيق اهدافها، حيث تم تطبيق استطلاع الراي النخبوي على (32) شخص من الخبراء في مجال السياسية وعلم الاقتصاد والاجتماع وممثلو المجتمع المدني والحكومات، واستخدمت تقنيات الاستشراف والذكاء الاصطناعي في تحليل بيانات "استطلاع الراي النخبوي"، حيث استخدمت الدراسة تقنيات الذكاء الاصطناعي المختلفة في عدة جوانب رئيسية مثل " " ChatGPT " و " AI Futurist by " Futures Platform" في تكامل البيانات و تحليلها ومعالجة البيانات الضخمة وانشاء السيناريوهات وتقييمها.

وخلصت الدراسة الى مجموعة من النتائج اهمها، ان العوامل السياسية هي الاكثر الاهمية في الواقع المعاش في الضفة الغربية تليها العوامل الاقتصادية ومن ثم الاجتماعية، وفيما يتعلق بالعوامل الاكثر

تأثيراً بالواقع المعاش اظهرت النتائج ان "خط التنمية" للسلطة الوطنية الفلسطينية واسرائيل عبر تحكمها بالمعابر واموال المقاصة كانت الاكثر تأثيراً.

واوضحت النتائج ان العوامل الاقتصادية الاكثر تأثيراً بالسيناريوهات المستقبلية كانت قدرة السلطة الوطنية الفلسطينية على تنظيم التزاماتها المادية والايفاء بها، وتحكم اسرائيل باموال المقاصة، واما فيما يتعلق بالعوامل الاجتماعية الاكثر تأثيراً على مستقبل المجتمع الفلسطيني فقد اظهرت النتائج ان "تنامي الفقر" ويليه عامل الهجرة هم الاكثر تأثيراً.

كما اظهرت النتائج ان هناك حالة كبيرة من عدم الاستقرار السياسي والاقتصادي والاجتماعي، مما يجعل جميع الخيارات المطروحة مفتوحة لتكوين المستقبل.

الكلمات المفتاحية: الذكاء الاصطناعي، التخطيط الاستراتيجي، الدراسات المستقبلية، تقنيات الاستشراف.