



**Professional Research Thesis**

**Titled**

*The impact of artificial intelligence on developing corporate social  
responsibility programs*

*A field study on public and business sector organizations in Syria*

**Researcher**

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## ***Thanks***

*Praise be to God for His generosity, and praise be to God for His majestic glory, who has, by His grace, enabled me to complete this humble work.*

*At moments such as these, the pen pauses to reflect before tracing letters to form words... letters scatter, and in vain does one attempt to gather them into lines... many lines pass through the imagination, and ultimately, all that remains is to express my deepest gratitude and appreciation to Dr., **Mohamed Eladawi** who graciously supervised this research and who has been the best support and pillar for me. His imprint is on every letter of this research, and to him, I extend my utmost respect and appreciation.*

*Words race and expressions crowd to weave a garland of thanks to all who paved the way for us to reach this point... to all who lit a candle along the paths of our learning and took us by the hand to the shore of safety, transcending the waves of failure... and to all who stood upon the podiums and gave from the wealth of their thought to illuminate our path...*

*With all love and loyalty, with the most tender words of thanks and praise, and from a heart filled with fellowship, I extend my gratitude to my friends and to all who contributed to the completion of this research.*

## ***Dedication***

*To the eternal icon of love... to that legend whose letters were woven with gold...  
and that narrative which tells the story of steadfastness through the ages...*

### ***My Homeland***

*To the jewel in the crown of Muslims... the heartbeat of every free person in this  
world... to that land which taught us that knowledge is resistance... that education  
is the path to freedom... and that the truthful word cannot be defeated...*

### ***Palestine***

*To him whom God has crowned with dignity and reverence... to him whose name  
I carry with all pride... his words shall remain a beacon by which I am guided  
today, tomorrow, and forever...*

### ***My Dear Father***

*To my angel in life... the pillar of my soul through all its phases... to her who  
instilled in me the love of knowledge and embraced my dreams as if they were  
her own... every letter in this thesis is an extension of your prayers... and every  
achievement is a fruit of your immeasurable giving...*

### ***My Beloved Mother***

*To the companions of the path and soul... to those who were my support on the road to success... and steadied my stumbling steps... to the blossoms of my life...*

***My Brothers and Sisters***

*To the flower of my heart and its unfading pulse... to the love that cannot be measured... to the adornment of my life and its joy...*

***My Sister Abeer***

## Abstract

*This study aims to identify the impact of artificial intelligence on the development of corporate social responsibility programs in public sector and business organizations in Syria, and to enhance theoretical knowledge regarding the concept of Artificial Intelligence (AI) and Corporate Social Responsibility (CSR). The significance of this study stems from the importance of the topic it addresses, particularly regarding the utilization of artificial intelligence (AI) technologies in developing corporate social responsibility programs.*

*To achieve the study objectives and test the hypotheses, the researcher designed a questionnaire covering aspects related to the impact of artificial intelligence on the development of corporate social responsibility programs. Accordingly, it was divided into three main sections: the first section included questions related to demographic data concerning the research sample members, such as gender, age, educational qualifications, and management level; the second section consisted of 20 statements measuring artificial intelligence; and the third section comprised 10 statements measuring the development of social responsibility programs.*

*The study population consists of employees in senior, middle, and executive management within public sector and business organizations in Syria that utilize*

*artificial intelligence and include social responsibility programs among their organizational activities. The researcher employed random sampling, with 300 questionnaires distributed electronically across four organizations, of which 279 valid questionnaires were retrieved for statistical analysis.*

*Using appropriate statistical tests, the study concluded that artificial intelligence technologies (genetic algorithms, expert systems, intelligent agents, and intelligent systems) are being used to develop corporate social responsibility programs in the study sample in a manner that meets the needs of both employees and society simultaneously. This is achieved through: reaching rapid solutions to problems, solving problems that are difficult to address through traditional methods, accelerating decision-making processes, keeping pace with dynamic environmental changes, improving institutional performance in delivering social services, utilizing intelligent systems such as Chat GPT within business organizations for decision-making, better understanding and predicting community needs, increasing the effectiveness of social responsibility projects, and achieving sustainable development goals within the organization. However, there are challenges that hinder the use of artificial intelligence in developing corporate social responsibility programs.*

*The study recommends the necessity of utilizing artificial intelligence technologies in developing corporate social responsibility programs to meet the needs of both employees and society simultaneously, conducting specialized workshops to examine the challenges and obstacles facing business organizations in Syria and finding solutions while implementing and developing various social responsibility programs, and the necessity of educating and training managers on artificial intelligence technologies and domains and how to manage and develop them in alignment with the plans and policies of business organizations regarding the adoption and development of corporate social responsibility programs.*

## Introduction.

*Recent years have witnessed tremendous development in the fields of knowledge and information technology. Technology has become an indispensable fundamental element in all aspects of life, and this has been clearly reflected in the designations given to the current era, including: the era of knowledge explosion, the information age, the era of scientific developments, and the era of the Fourth Industrial Revolution, known for its reliance on the phenomenon of digital transformation that focuses on the integration of technologies such as cloud computing, the Internet of Things, big data analytics, and artificial intelligence.*

*The progress of nations is no longer measured merely by the information they possess, but by their ability to organize and employ that information in service of humanity. Consequently, the most advanced countries in the field of information technology have become the most economically and financially powerful.*

*There is no doubt that humanity stands on the threshold of new knowledge developments that will transform the shape of human life—developments founded upon Artificial Intelligence (AI). These represent comprehensive knowledge developments at various social, economic, security, and other levels, because*

*artificial intelligence applications branch out and multiply in ways that cannot be fully comprehended or enumerated; they are entering virtually all human domains.*

*Today, business organizations stand at a critical crossroads in the use of artificial intelligence, as this technology can bring about a qualitative leap in all aspects of business. Artificial intelligence has become increasingly attractive to business organizations for implementing innovative strategies that enhance their performance. Consequently, these organizations have rushed to utilize artificial intelligence technology to achieve maximum benefits through applying or investing in a complete range of intelligent technologies. In short, the primary driving force for artificial intelligence can be the achievement of competitive advantage.*

*However, the role of business organizations in using artificial intelligence is no longer limited to improving efficiency and increasing productivity and profits alone; it extends to responsible innovation, community service, and risk reduction, while achieving long-term sustainability. Artificial intelligence technology is currently being increasingly used in various fields, including the development of social responsibility programs in business organizations. Artificial intelligence technology in this domain revolves around developing policies, procedures, and*

*practices that ensure the appropriate, effective, and ethical use of intelligent technologies to achieve distinctive quality programs that provide services both internally within organizations (employees) and externally (society).*

*Corporate Social Responsibility (CSR) is considered a fundamental component of innovation strategy, as it provides an opportunity for companies to interact positively with society and enhance their positive impact. Business organizations face a dual challenge of embracing innovation through artificial intelligence while taking social responsibility into account. Social responsibility means that companies are not only accountable to their shareholders or employees, but also to society. Furthermore, ethics is considered an urgent necessity for companies today, as the role of companies in using artificial intelligence requires a responsible approach that balances innovation with ethical principles.*

*Given this growing use of intelligent applications in corporate social responsibility programs, and the emerging ethical and legal challenges in this field, the use of artificial intelligence technologies in developing corporate social responsibility programs is considered vital and necessary. It aims to ensure that intelligent technologies are used ethically and effectively, in addition to ensuring transparency in their use.*

*It is agreed that information technology and artificial intelligence have become an important foundation for managing the knowledge and processes necessary to maintain the social and economic activities of business organizations. The ability of institutions to grow, survive, and continue has become largely dependent on the extent of their efficiency in managing information technology so that it can be utilized in creating opportunities and advantages, as well as their ability to face challenges and manage associated risks.*

*Accordingly, artificial intelligence can be used to improve services and products in ways that consider ethics. Through this, companies contribute to addressing social and environmental challenges effectively, achieving tangible benefits for both companies and society. Thus, the role of companies in using artificial intelligence expands to include improving quality of life and promoting sustainability.*

## The study Problem.

*The current era has witnessed significant development in business software and technology across all activities and aspects of business organizations. These software solutions have achieved numerous benefits at various levels, including increased return on investment, improved employee performance efficiency within the organization, achieving flexibility in production and administrative activities, and an increased number of stakeholders. All these outcomes help ensure the organization's continuity, development, and reputation enhancement through the use of artificial intelligence software during business execution in business sector organizations.*

*Adopting corporate social responsibility programs is vital for organizational success in the competitive business world. With technological advancement, it has become possible to use modern technologies to develop corporate social responsibility programs in business organizations and increase their effectiveness and efficiency. Among these technologies, artificial intelligence stands out as a powerful tool that can be used in developing social responsibility programs in business organizations.*

*Despite the expansion in adopting artificial intelligence technologies in business organizations, the extent of the actual contribution of these technologies to developing corporate social responsibility programs remains unclear. While artificial intelligence technologies are being used to improve organizational efficiency, questions remain about the extent to which organizations benefit from artificial intelligence technologies in developing their programs in the field of social responsibility.*

*Taking into consideration that, in reality, a number of companies adopt social responsibility programs in their future plans, while other companies do not adopt social responsibility programs sufficiently or as required, believing that they constitute an additional burden on the company's operations in terms of financial resources and human resources, and not viewing the matter as a long-term investment.*

*Hence, our research problem is represented by the following question: What is the impact of artificial intelligence on the development of social responsibility programs for public sector and business organizations in Syria?*

## The importance of studying:

*Given the importance of the topic addressed by the researcher regarding the utilization of Artificial Intelligence (AI) technologies in developing corporate social responsibility programs and creating an advanced state of services provided by business organizations to both employees and society simultaneously, this significance can be clarified through two aspects:*

***Scientific Significance.*** *The scientific and academic significance of this research lies in its being a modest contribution that addresses a topic reflecting the current global trend in modern technology, shedding light on the impact of artificial intelligence on the development of corporate social responsibility programs in public sector and business organizations in Syria. According to a survey conducted on global search engines, this study is among the few studies—to the researcher's knowledge—that have combined both variables (artificial intelligence and the development of corporate social responsibility programs). Consequently, this study represents a new addition to the Arabic library in this type of field.*

***Practical Significance.*** *This study provides valuable insights for public sector and business organizations in Syria regarding how to leverage artificial intelligence technologies as an effective tool in the hands of organizations for developing*

*corporate social responsibility programs, thereby achieving distinction from others. It contributes to providing them with information about the benefits of implementing artificial intelligence to develop work horizons in organizations. It is also hoped that the results and recommendations of this study will benefit decision-makers in business organizations by expanding their awareness of the importance of employing artificial intelligence applications in developing corporate social responsibility programs.*

## Objectives of the study:

*The main objective of the study is. To identify the impact of artificial intelligence on the development of corporate social responsibility programs in public sector and business organizations in Syria. Several sub-objectives derive from the main objective, as follows:*

- *To identify the impact of genetic algorithms on the development of corporate social responsibility programs in public sector and business organizations in Syria.*
- *To identify the impact of expert systems on the development of corporate social responsibility programs in public sector and business organizations in Syria.*
- *To identify the impact of intelligent agents on the development of corporate social responsibility programs in public sector and business organizations in Syria.*
- *To identify the impact of intelligent systems on the development of corporate social responsibility programs in public sector and business organizations in Syria.*

- *To enhance theoretical knowledge regarding the concepts of Artificial Intelligence (AI) and Corporate Social Responsibility (CSR).*
- *To provide recommendations and proposals that would assist decision-makers in benefiting from them in developing social responsibility programs in their organizations.*

## Study hypotheses and questions.

### Study Questions.

*The main research question is: What is the impact of artificial intelligence on the development of corporate social responsibility programs in public sector and business organizations in Syria?*

*Several sub-questions derive from this main question as follows:*

- *What is the impact of genetic algorithms on the development of corporate social responsibility programs in public sector and business organizations in Syria?*
- *What is the impact of expert systems on the development of corporate social responsibility programs in public sector and business organizations in Syria?*
- *What is the impact of intelligent agents on the development of corporate social responsibility programs in public sector and business organizations in Syria?*
- *What is the impact of intelligent systems on the development of corporate social responsibility programs in public sector and business organizations in Syria?*

### *Study Hypotheses:*

*To answer the study questions, the researcher formulated the following hypotheses:*

***First Main Hypothesis:*** *There is no statistically significant impact at the significance level ( $\alpha \leq 0.05$ ) of using Artificial Intelligence (AI) on the development of corporate social responsibility programs in public sector and business organizations in Syria.*

*The following sub-hypotheses derive from this hypothesis:*

- ***First Sub-hypothesis:*** *There is no statistically significant impact at the significance level ( $\alpha \leq 0.05$ ) of using genetic algorithms on the development of corporate social responsibility programs in public sector and business organizations in Syria.*
- ***Second Sub-hypothesis:*** *There is no statistically significant impact at the significance level ( $\alpha \leq 0.05$ ) of using expert systems on the development of corporate social responsibility programs in public sector and business organizations in Syria.*
- ***Third Sub-hypothesis:*** *There is no statistically significant impact at the significance level ( $\alpha \leq 0.05$ ) of using intelligent agents on the development*

*of corporate social responsibility programs in public sector and business organizations in Syria.*

- *Fourth Sub-hypothesis: There is no statistically significant impact at the significance level ( $\alpha \leq 0.05$ ) of using intelligent systems on the development of corporate social responsibility programs in public sector and business organizations in Syria.*

*Second Main Hypothesis: There are no statistically significant differences at the significance level ( $\alpha \leq 0.05$ ) among demographic variables: gender, age, educational qualifications, and administrative level regarding the use of Artificial Intelligence (AI) technologies in developing corporate social responsibility programs in public sector and business organizations in Syria.*

*The following sub-hypotheses derive from this hypothesis:*

- *First Sub-hypothesis: There are no statistically significant differences at the significance level ( $\alpha \leq 0.05$ ) for gender regarding the use of Artificial Intelligence (AI) technologies in developing corporate social responsibility programs in public sector and business organizations in Syria.*
- *Second Sub-hypothesis: There are no statistically significant differences at the significance level ( $\alpha \leq 0.05$ ) for age regarding the use of Artificial*

*Intelligence (AI) technologies in developing corporate social responsibility programs in public sector and business organizations in Syria.*

- *Third Sub-hypothesis: There are no statistically significant differences at the significance level ( $\alpha \leq 0.05$ ) for educational qualifications regarding the use of Artificial Intelligence (AI) technologies in developing corporate social responsibility programs in public sector and business organizations in Syria.*
- *Fourth Sub-hypothesis: There are no statistically significant differences at the significance level ( $\alpha \leq 0.05$ ) for administrative level regarding the use of Artificial Intelligence (AI) technologies in developing corporate social responsibility programs in public sector and business organizations in Syria.*

### ***Study Population and Sample***

#### ***Study Population.***

*The researcher selected the study population represented by public sector and business organizations in Syria, to demonstrate through this study the extent to which these organizations adopt social responsibility programs, as well as the extent of their benefit from using Artificial Intelligence (AI) technologies in developing their social responsibility programs. Consequently, we can comprehend the reality of social responsibility in public sector and business*

*organizations in Syria and the extent of development and keeping pace with Artificial Intelligence (AI) technologies in achieving the development of corporate social responsibility programs.*

***Study Sample:***

*The study sample consisted of a number of public sector and business organizations in Syria, as follows:*

- *Syrian Virtual University*
- *Al-Jazeera Private University*
- *ELI.SYR Company for E-Learning in Syria*
- *Sama Net Company for Electronic Payment in Syria*

## Study Approach.

*This study adopted the descriptive-analytical method, through examining and analyzing studies, research, books, and periodicals related to the research topic, which is artificial intelligence and its impact on the development of corporate social responsibility programs. This approach was used to identify the theoretical foundation of artificial intelligence applications, as well as the concepts, dimensions, and importance of corporate social responsibility, which can be utilized in developing the work of business organizations.*

## The limits of the study:

***Spatial Limitations.** The study relied on a number of public and private universities, institutions, and companies, represented by: Syrian Virtual University - Al-Jazeera Private University - ELL.SYR Company for E-Learning in Syria - Sama Net Company for Electronic Payment in Syria.*

***Temporal Limitations.** This study examined references and sources published during the period extending from 2010 to 2025, with the aim of tracking qualitative transformations in the uses of artificial intelligence within social responsibility programs, and analyzing the evolution of concepts and applications during this period, which witnessed accelerated growth in intelligent technologies and their employment in developmental contexts.*

***Thematic Limitations (Study Variables):** boundaries of the study, which include its variables: **Independent Variable:** Artificial Intelligence with its dimensions (Genetic Algorithms - Expert Systems - Intelligent Agents - Intelligent Systems), **and** **Dependent Variable:** Development of Corporate Social Responsibility Programs.*

***Independent Variable Artificial Intelligence (AI)***

- *Genetic Algorithms*

- *Expert Systems*
- *Intelligent Agents*
- *Intelligent Systems*

→ *Dependent Variable* → *Development of Corporate Social Responsibility (CSR)*

*Programs*

*Source: Prepared by the researcher*

### *Operational Definitions of Study Terms*

*Artificial Intelligence (AI): A set of software programs used to develop computerized systems in a manner that enables machines to perform tasks requiring intelligence in a manner similar to humans. They are applied to assist business organizations in creating a qualitative transformation in how they interact with society and the environment, through the following applications: (algorithms, expert systems, intelligent systems, intelligent agents).*

*Genetic Algorithms: An approach to solving societal problems that require intelligence by designing intelligent models based on rules and symbolic mathematical analyses to analyze data, reach rapid solutions, and keep pace with continuous dynamic environmental changes and developments.*

***Expert Systems:*** A set of systems that rely on knowledge bases and logical algorithms to simulate expert thinking in corporate social responsibility programs. They are used to preserve expert knowledge before they leave the organization in the expert system's knowledge base, and to reproduce and share this expertise in data analysis processes, evaluating social initiatives, measuring social and environmental impact, and managing ethical risks, to help business organizations understand social impact and return and determine their competitive future.

***Intelligent Agents:*** A set of software programs used to execute intelligent tasks and make autonomous decisions by responding to their sensors in monitoring and analyzing social and environmental impact, with the aim of implementing social or environmental programs and projects with effective impact.

***Intelligent Systems:*** The most prominent digital transformation tools in social responsibility programs, enabling business organizations to implement their initiatives efficiently and effectively through programs that operate via sensing, processing, and organization to enable environmental description and analysis, issuing predictive or adaptive judgments based on available facts, and implementing intelligent actions.

*Corporate Social Responsibility (CSR): A voluntary ethical commitment undertaken by business organizations toward society and the environment, with the aim of positive impact at all societal levels in which they exist, as a form of giving back to the society that has contributed to the development of their business and activities.*

*Development of Social Responsibility Programs (CSR): The design and implementation of strategic initiatives that integrate social and environmental values within business organization objectives to contribute to sustainable development of society and the environment. This means moving from mere ethical commitment to an integrated strategy that contributes to sustainable development.*

## Conclusion.

*Artificial intelligence represents a powerful tool for addressing societal challenges. Thanks to its ability to analyze data, predict risks, and propose innovative solutions, this technology can revolutionize the way we deal with social and environmental issues. However, the success of these efforts depends on cooperation among governments, business organizations, and communities.*

*Artificial intelligence is not merely a technology; it is a pivotal force for transforming various activities in business organizations toward more sustainable and effective paths. The future holds tremendous possibilities for new innovations in the field of artificial intelligence that will contribute to addressing social and environmental problems more effectively. However, to achieve this future, governments and business organizations must work together to support technological projects for developing social responsibility programs in business organizations. Individuals and communities must also be part of this transformation by adopting smart and sustainable solutions in their daily lives. Thus, we can achieve sustainable development that preserves planet Earth for future generations.*

*In conclusion, artificial intelligence demonstrates tremendous potential as a tool for achieving social responsibility in innovative ways, through improving efficiency, enhancing transparency, and providing innovative solutions to social and environmental problems in society.*

*Nevertheless, companies must be aware of the ethical challenges associated with using this technology. Through commitment to ethical standards and responsible use of artificial intelligence, companies can effectively achieve their social and environmental goals.*

*Despite the efforts made by business organizations in Syria aimed at improving organizational reputation and achieving competitive advantage through the use of artificial intelligence technologies in executing their operations, there are some shortcomings in developing social responsibility programs in these organizations. This is often limited to performing the social role imposed on them by the government only, which has led to increased attention to this aspect so that business sector organizations can benefit from artificial intelligence applications to truly and effectively adopt and develop corporate social responsibility programs. Certainly, the future holds great opportunities for using artificial intelligence in enhancing and developing corporate social responsibility. Business organizations*

*must be prepared to leverage these opportunities to achieve positive and sustainable impact in organizations and society.*

## Results:

- *Genetic algorithms are used in developing corporate social responsibility programs in public sector and business organizations in Syria, specifically in terms of: reaching rapid solutions to problems, solving problems that are difficult to address through traditional methods, accelerating decision-making processes, keeping pace with dynamic environmental changes, and improving institutional performance in delivering social services.*
- *Expert systems are used in developing corporate social responsibility programs in public sector and business organizations in Syria, specifically in terms of: solving unstructured problems, identifying appropriate alternatives for decision-making as effective tools in knowledge-based decision-making, supporting social responsibility programs through providing intelligent consultations, and enhancing efficiency and quality in delivering public services.*
- *Intelligent agents are used in developing corporate social responsibility programs in public sector and business organizations in Syria, specifically in terms of: assisting in the decision-making process, responding to customer messages, training workers in the social field, and effectively supporting*

*social responsibility programs to contribute to improving the quality of services provided to society.*

- *Intelligent systems are used in developing corporate social responsibility programs in public sector and business organizations in Syria, specifically in terms of: using intelligent systems such as Chat GPT within business organizations for decision-making, reducing the time employees use to reach desired organizational goals, facilitating information exchange between administrative units through organizational communication networks which enhances effective communication, using intelligent systems as alternatives to human agents thereby reducing contract costs, and assisting in finding rapid solutions in changing environments.*
- *Corporate social responsibility programs are being developed using artificial intelligence in public sector and business organizations in Syria, specifically in terms of: better understanding and predicting community needs, improving responsibility programs, increasing the effectiveness of social responsibility projects, achieving sustainable development goals in the organization, providing innovative solutions in community work, enhancing the societal impact of corporate programs, and better designing social*

*initiatives when developing social responsibility programs in business organizations.*

- *Artificial intelligence has a promising future in improving the social impact of business organizations.*
- *There are challenges that hinder the use of artificial intelligence in developing corporate social responsibility programs.*
- *There is a positive impact of using artificial intelligence technologies in developing corporate social responsibility programs in public sector and business organizations in Syria, where:*
  - *The use of genetic algorithms separately affects the development of social responsibility programs.*
  - *The use of expert systems, intelligent agents, and intelligent systems collectively and positively affect the development of corporate social responsibility programs.*
- *There are no statistically significant differences for demographic variables (gender, age, educational qualifications, administrative level) regarding the*

*use of Artificial Intelligence (AI) technologies in developing corporate social responsibility programs in public sector and business organizations in Syria.*

## **Recommendations.**

*Based on the findings of the study, the following recommendations have been formulated.*

- *Emphasizing the adoption of artificial intelligence technologies (genetic algorithms, expert systems, intelligent agents, and smart systems) by business organizations in Syria to develop corporate social responsibility programs that simultaneously address the needs of employees and the community.*
- *Organizing specialized workshops to investigate the challenges and obstacles faced by business organizations in Syria and to devise solutions for them during the implementation and development of diverse corporate social responsibility programs.*
- *Highlighting the necessity of educating and training managers on artificial intelligence technologies and their management and development, aligning*

*with the plans and policies of business organizations to adopt and enhance corporate social responsibility programs.*

- *Providing decision-makers in business organizations (the study sample) with the study's findings to optimize the use of artificial intelligence technologies in developing corporate social responsibility programs.*
- *The researcher recommends conducting comprehensive future studies on the overall impact of artificial intelligence technologies on the development of corporate social responsibility programs for business organizations.*

## The reviewer:

### Arabic references:

#### أولاً- الكتب:

- ابراهيم بدر الصبيحات، أخلاقيات العمل والمسؤولية الاجتماعية، عمان، الأردن، دار الجنان للنشر والتوزيع، 2017.
- د. أحمد عبدالمجيد عبدالعزيز منصور، الذكاء الاصطناعي والأمن القومي، ميامي، الإسكندرية، دار التعليم الجامعي للطباعة والنشر والتوزيع، 2024.
- أحمد محمد عادل السنهوري، مدى تقنيات الروبوت، عمان، الأردن، دار اليازوري العلمية للنشر والتوزيع، 2022.
- د. أحمد محيي خلف صقر، المسؤولية المجتمعية في العالم العربي والعالم، ميامي، الإسكندرية، دار التعليم الجامعي، 2019.
- بشير العلاق، الإدارة الحديثة نظريات ومفاهيم، عمان، الأردن، دار اليازوري العلمية للنشر والتوزيع، 2019.
- د. دعاء محمود عبدالعال عبدالراضي، د. خالد السيد عبدالحق، اخلاقيات العلاقات العامة، عمان، الأردن، دار اليازوري العلمية للنشر والتوزيع، 2023.
- ذوقان عبيدات، عبدالرحمن عدس، كريد عبدالخالق، البحث العلمي، مفهومه، أدواته وأساليبه، عمان، الأردن، دار الفكر للطباعة والنشر والتوزيع، 2001.

- د. رافدة الحريري، نظم وسياسات التعليم وتطويرها في دول مجلس التعاون الخليجي، عمان، الأردن، دار اليازوري العلمية للنشر والتوزيع، 2018.
- رانية نادر القاضي، القانون والذكاء الاصطناعي، عمان، الأردن، دار المعتز للنشر والتوزيع، الطبعة الأولى، 2024.
- زياد الجرجاوي، القواعد المنهجية لبناء الاستبيان، فلسطين، مطبعة أبناء الجراح، الطبعة الأولى، 2010.
- سالم عبدالله الفاخري، سيكولوجية الإبداع، عمان، الأردن، مركز الكتاب الأكاديمي، 2018.
- سعد غالب ياسين، الإدارة الإلكترونية، الأردن، عمان، اليازوري للنشر والتوزيع، 2016.
- د. شريف حمدي، تطبيقات الذكاء الاصطناعي وتعزيز الميزة التنافسية لمنظمات الأعمال، القاهرة، مصر، العربي للنشر والتوزيع، 2023.
- شيراز محمد خضر، إدارة الشركات، لندن، دار الأكاديمية للطباعة والنشر والتوزيع، الطبعة الأولى، 2022، ص 10.
- صالح الفضلي، آلية عمل العقل عند الإنسان، القاهرة، مصر، عصير الكتب للنشر والتوزيع، 2019.
- عبدالله موسى، أحمد بلال، الذكاء الاصطناعي: ثورة في تقنيات العصر، القاهرة، مصر، المجموعة العربية للتدريب والنشر، الطبعة الأولى، 2019.
- د. علي العابدي، ادارة راس المال الفكري في المنظمات، عمان الأردن، دار اليازوري للنشر والتوزيع، 2025.

- د. لمياء محسن حسن، مجالات الذكاء الاصطناعي تطبيقات وأخلاقيات، القاهرة، مصر، العربي للنشر والتوزيع، 2024.
- مارك كوكليبرج، أخلاقيات الذكاء الاصطناعي، ترجمة هبة عبدالعزيز غانم، سلسلة المعارف الدولية، يورك هاوس، المملكة المتحدة، مؤسسة هنداوي للنشر، 2024.
- محمد عقوني، تحقيق النجاح في عصر الذكاء الاصطناعي، e-Book، مكتبة نور، <https://www.noor>، 2023.
- د. محمد شوقي العناني، د. اسلام هديب، الذكاء الاصطناعي ودوره في مكافحة الفساد، القاهرة، مصر، دار النهضة العربية للنشر والتوزيع، الطبعة الأولى، 2022.
- أ.د. محمد محمد الهادي، الذكاء الاصطناعي: معالمه وتطبيقاته وتأثيراته التنموية والمجتمعية، القاهرة، مصر، الدار المصرية اللبنانية للنشر والتوزيع، الطبعة الأولى، 2021.
- د. محمد فلاق، المسؤولية الاجتماعية لمنظمات الأعمال، عمان، الأردن، دار اليازوري العلمية للنشر والتوزيع، 2019.
- أ.د. منال البلقاسي، التعليم المستدام في ظل الذكاء الاصطناعي، دمشق، سورية، دار عقل للنشر، 2025.
- د. ناصر جرادات، الأستاذ عزام أبو الحمام، المسؤولية الأخلاقية والاجتماعية للمنظمات، عمان، الأردن، دار إثراء للنشر والتوزيع، 2014.

- د. ناصر جرادات، الأستاذ عزام أبو الحمام، المسؤولية الأخلاقية والاجتماعية للمنظمات، عمان، الأردن، دار إثراء للنشر والتوزيع، 2012.
- نجم العيساوي، حوكمة الذكاء الاصطناعي، عمان، الأردن، دار اليازوردي العلمية للنشر والتوزيع، 2025.
- د. نضال عمار، علا عباس، المسؤولية الاجتماعية للشركات وأخلاقيات العمل، دمشق، سورية، منشورات الجامعة الافتراضية السورية، 2022.
- د. هالة أحمد الحسيني، د. دعاء هشام جمعة، الذكاء الاصطناعي وتوظيفه في المؤسسات الإعلامية، القاهرة، مصر، العربي للنشر والتوزيع، الطبعة الأولى، 2024.
- وليد محمد الأميري، المسؤولية الاجتماعية للمصارف الخاصة، عمان، الأردن، دار اليازوري العلمية للنشر والتوزيع، 2019.
- ياسين سعد غالب، أساسيات نظم المعلومات الإدارية وتكنولوجيا المعلومات، عمان، الأردن، دار المناهج للنشر والتوزيع، 2012.
- د. يونس إبراهيم التميمي، الإدارة الاستراتيجية في المصرف الإسلامي، عمان، الأردن، دار الأكاديميون للنشر والتوزيع، 2021.

### ثانياً- الرسائل والمجلات والملتقيات والمراكز العلمية:

- أحمد علي يوسف العاصي، تقييم خبراء الإعلام للأبعاد الأخلاقية والمهنية للذكاء الاصطناعي في الإعلام الرقمي دراسة ميدانية، رسالة ماجستير، الجامعة الإسلامية في غزة، 2021.

- أخلاقيات وحوكمة الذكاء الاصطناعي في قطاع الصحة، إرشادات منظمة الصحة العالمية، ملخص تنفيذي، منظمة الصحة العالمية، 2021.
- الأسد صالح الأسد، المخاوف الأخلاقية من الاستخدامات السلبية لتقنيات الذكاء الاصطناعي: تقنية التزييف العميق أنموذجاً، مجلة الرسالة للدراسات الإعلامية، المجلد 6، العدد 2، 2022.
- أمينة عثمانينة، المفاهيم الأساسية للذكاء الاصطناعي، برلين، ألمانيا، المركز الديمقراطي العربي للدراسات الاستراتيجية والسياسية والاقتصادية، ص 9 - 22، 2019.
- جورج ميشيل، دور الذكاء الاصطناعي في حوكمة الشركات، المجلة الدولية للفقهاء والقضاء والتشريع، المجلد 4، العدد 2، صفحات (423 - 397)، 2023.
- سامية قمورة، ومحمد باي؛ وحيزية كروش، الذكاء الاصطناعي بين الواقع والمأمول - دراسة تقنية وميدانية-، الملتقى الدولي "الذكاء الاصطناعي: تحد جديد للقانون" الجزائر، 26- 27 نوفمبر، 2018.
- سهام العايب، استخدام الخوارزميات الجينية كأحدى تقنيات الذكاء الاصطناعي في مجالي الاقتصاد وإدارة الأعمال، برلين، ألمانيا، المركز الديمقراطي العربي للدراسات الاستراتيجية والسياسية والاقتصادية، الطبعة الأولى، 2019.
- صادق عبدالله القصاب، دور التحول الرقمي كوسيط بين المسؤولية الاجتماعية الرمزية والمسؤولية الاجتماعية الجوهرية في شركات الإلكترونيات في أزمير - تركيا، المجلة العربية للمسؤولية المجتمعية، المجلد الثالث، العدد الأول، 2025.

- صخر عبدالرحمن الصعوب، مفاهيم الذكاء الاصطناعي والمواطنة الرقمية المتضمنة والمقترح تضمينها في كتب الحاسوب للمرحلتين الأساسية والثانوية في الأردن، رسالة دكتوراه، جامعة مؤتة، 2022.
- د. ضياء بهاء الدين فؤاد، د. مصطفى فهمي أبو الوفا محمود، نموذج محاسبي مقترح لقياس أثر الذكاء الاصطناعي في تعديل العلاقة بين الإفصاح عن المسؤولية الاجتماعية والأداء المالي: دراسة تطبيقية، مجلة الإبداع المحاسبي، المجلد الثاني، العدد الخامس، 2025.
- د. عادل عبدالصادق، الذكاء الاصطناعي بين الأمانة والعسكرة والحوكمة، القاهرة، مصر، المركز العربي لأبحاث الفضاء الإلكتروني، 2023.
- غزة عبدالرزاق، الأسس المفاهيمية والتقنية للذكاء الاصطناعي وتطوره: من نماذج الحوسبية إلى التعلم الآلي، الدوحة، قطر، المركز العربي للأبحاث ودراسة السياسات، 2024.
- فطيمة نجاري، الذكاء الاصطناعي ودوره في تعزيز تنافسية المؤسسة الاقتصادية: مقارنة نظرية، برلين ألمانيا، المركز الديمقراطي العربي للدراسات الاستراتيجية والسياسية والاقتصادية، الطبعة الأولى، 2019.
- قدري ابراهيم، أثر المسؤولية الاجتماعية في الأداء: دراسة تطبيقية على الشركات المساهمة السورية، أطروحة مقدمة لنيل درجة الدكتوراه في إدارة الأعمال، جامعة دمشق، كلية الاقتصاد، 2015.
- محمد عبيدات، محمد أبو نصار، عقلة مبيضين، منهجية البحث العلمي: القواعد والمراحل والتطبيقات، الجامعة الأردنية، كلية الاقتصاد والعلوم الإدارية، 1999.

- نشوى رفعت شحاته، توظيف تطبيقات الذكاء الاصطناعي في العملية التعليمية - كلية التربية، جامعة دمياط، مجلة الجمعية المصرية للكمبيوتر التعليمي، المجلد العاشر، العدد الثاني، ص 205 - 214، 2022.

- د. نضال عمار، دور المسؤولية الاجتماعية للشركات والمنشآت المحلية في التنمية المستدامة: الشركات والمنشآت الأعضاء في الشبكة السورية للميثاق العالمي للأمم المتحدة نموذجاً، رسالة دكتوراه، جامعة دمشق، 2016.

- د. هبة صبحي جلال إسماعيل، توظيف تطبيقات الذكاء الاصطناعي في التعليم بمصر في ضوء تجربتي الإمارات العربية المتحدة وهونج كونج: دراسة تحليلية -، مجلة جامعة مطروح، المجلد (4)، العدد (6)، 2023.

### ثالثاً - المواقع الإلكترونية:

- الموقع الرسمي للجامعة الافتراضية السورية [/https://www.svuonline.org](https://www.svuonline.org)

- الموقع الرسمي لجامعة الجزيرة الخاصة <https://jude.edu.sy/>

## Foreign references:

### Books

- Andreas. Kaplan; Michael, Haenlein, Siri, **Illustrations and Implications of Artificial Intelligence**, Business Horizons, 62(1), 15-25, 2019.
- Bryon, M., & Clark, T. R. **Ethical Considerations for AI in HR**, Harvard Business Review. Floridi, L., Taddeo, 2019.
- Krejcie, R. V., & Morgan, D. W, **Determining sample size for research activities**, Educational and Psychological Measurement, 30(3), 607–610, 1970.
- Rahmatizadeh, S. Valizadeh-Haghi, S. & Dabbagh, A, **The role of Artificial Intelligence in Management of Critical COVID-19**, patients J Cell Mol Anesth, 5(1):16-22, 2020.
- Danish, Mr. Mohd, **Artificial Intelligence and Machine Learning Lab Manual**, Edu Gorilla Community Pvt. Ltd, 2024.
- Jan W. Kuzma, Stephen. E. Bohneblust, **Basic Statistics for the Health Sciences**, McGraw-Hill Higher Education, 5th ed, 2004, P21.
- Saqib, Mr. Mohd, **Fundamentals of Artificial Intelligence**, Edu Gorilla Publication, 2024

ثانياً – المجلات والدوريات العلمية: **Scientific Journals**

- Bahrammirzaee, A. **A comparative survey of artificial intelligence applications in finance: Artificial neural networks, expert systems, and hybrid intelligent systems**, *Neural Computing and Applications*, 19 (7), 1165-1195, 2010. <https://doi.org/10.1007/s00521-010-0362-z>.
- Ghanbari, Farshid, Stefanos Giannakis, and Sofia Samoili. **Persulfate Application for Landfill Leachate Treatment: Current Status and Challenges**, *Persulfate-based Oxidation Processes in Environmental Remediation*. Royal society of Chemistry, 252-288, 2022.
- Jejenywa, T. O., & Mhlongo, N. Z. **A comprehensive review of the impact of artificial intelligence on modern accounting practices and financial reporting**, *Computer Science & IT Research Journal*, 5(4), 1031-1047, 2024.
- Mihret, E. T. **Robotics and Artificial Intelligence**, *International Journal of Artificial Intelligence and Machine Learning*, 10(2), 57–78, 2020. <https://doi.org/10.4018/ijaiml.2020070104>
- Nikitas, A. & Michalakopoulou, K. & Njoya, E. & Karampatzakis, D, **Artificial Intelligence, Transport and the Smart City: Definitions and Dimensions of a New Mobility Era**, *Sustainability, MDPI, Journal*, 12(7), 1-19, 2020.
- Pereira, L., Resio, M., Costa, R., Dias, Á. & Gonçalves, R. **Artificial Intelligence in Strategic Business Management: The Case of Auditing**, *International Journal of Business Information Systems*, 1 (1) 1-48, 1. 10.1504./IJBIS.10039269. 2021.
- Peter Lund-Thomsen, and Neil M. Coe **Corporate social responsibility and labor agency: the case of Nike in Pakistan**, *Oxford Journals. Economics & Social Sciences. Journal of Economic Geography*, Advance Access. 10.1093/jeg/lbt041, 2013.

### ثالثاً – الدراسات والأبحاث والتقارير : **Researches & Studies and Reports**

- Akgun, S., & Greenhow, C. **Artificial intelligence in education: Addressing ethical challenges in K-12 settings.** *AI and Ethics*, 2(3), 431–440, 2022. <https://doi.org/10.1007/s43681-021-00096-7>
- Brian Hill, **What Is Social Responsibility for an Organization?** chron, 2021 Retrieved 7/12/2021. Edited.
- Fastercapital, **Genetic Algorithm Optimizing Business Strategies with Genetic Algorithms**, (On- Line), 2024, Available: <https://fastercapital.com/content/GeneticAlgorithm-Optimizing-Business-Strategies-with-Genetic-Algorithms.html>.
- Hashem, F., & Alqatamin, R **Role of artificial intelligence in enhancing efficiency of accounting information system and nonfinancial performance of the manufacturing companies**, *International Business Research*, 14(12), 65-77, 2021. [https://doi.org/10.5539/ibr.v14n12\\_p65](https://doi.org/10.5539/ibr.v14n12_p65).
- Jackson, Amber, **AI Strategy, Top 10 companies with ethical AI practices**, Article by Amber Jackson, July 12, 2023. <https://aimagazine.com/ai-strategy/top-10-companies-with-ethical-ai-practices>
- JASON Fernando, **Corporate Social Responsibility (CSR)**, Investopedia, 2021, Retrieved 7/12/2021. Edited.
- JASON Fernando, **Corporate Social Responsibility (CSR)**, Investopedia, 2022, Retrieved 18/4/2022. Edited.
- Leitao, P., Karnouskos, S., Ribeiro, L., Lee, J., Strasser, T., & Colombo, A. **Smart Agents in Industrial Cyber-Physical Systems**, 2016, Available at: <https://www.researchgate.net/publication/299338073>

