

The Impact of Social Media Marketing Education on Financial Decision-Making Skills in Higher Education Institutions in Jordan

Atieh Mohd Albadarneh¹, Tareq Abdullah Alshurman², Abdullah Ewayed Twaresh³, Ahmad Y. A. Bani Ahmad⁴, Ahmad raja Albatayneh⁵, Iyad A. Al-Nsour^{6*}, Ahmed H. Helal⁷, Yaser A. ALshorafa⁸

¹Educational Sciences Department, Faculty of Educational Sciences, Ajloun National University, Ajloun, Jordan | Email: A.albadarneh@anu.edu.jo

²Business, Digital Marketing, Al-Zaytoonah University of Jordan, Jordan | Email: t.alshurman@zuj.edu.jo

³Department of Finance and Insurance, College of Business Administration, Northern Border University, Arar, Saudi Arabia | Email: abdullah.twaresh@nbu.edu.sa

⁴Business Faculty, Amman Arab University, Amman, Jordan

⁵Business Faculty, Amman Arab University, Amman, Jordan | Email: a.Albatayneh@aau.edu.jo

⁶Imam Mohammad Ibn Saud Islamic University (IMSIU), College of Media & Communication, Riyadh, Saudi Arabia | Email: iaalnsour@imamu.edu.sa

⁷Imam Mohammad Ibn Saud Islamic University (IMSIU), College of Media & Communication, Riyadh, Saudi Arabia | Email: ahhelal@imamu.edu.sa

⁸Associate Professor, Department of Business Administration, Faculty of Economics and Administrative Sciences, Islamic University of Gaza, Palestine | Email: yshorafa@iugaza.edu

***Corresponding Author:** Iyad A. Al-Nsour | Email: iaalnsour@imamu.edu.sa

Abstract

Due to the rapid advancements of digital technologies and the increasing prevalence of social media and on-line business, social media marketing education has gained a prominent position in business and marketing courses of Jordanian universities. Moreover, financial decision-making skills have been acquiring more importance for students at the university level, as they are currently navigating in an increasingly complicated environment with characteristics like digital payment systems, financial technology, on-line investment facilities and exposure to large amounts of financial information from social media. Despite this fact, the current level of research on social media marketing education and students' financial decision-making skills is limited, especially in the context of Jordanian higher education. This research aims to investigate the effects of social media marketing education on financial decision-making skills among students in Jordanian higher education. More precisely, this research will try to analyze the extent of association between social media marketing education and financial decision-making skills, to identify the determinants of students' financial decisions, to evaluate the outcomes of social media marketing education programs and to formulate a conceptual model for improving financial decision-making through social media marketing education. The present research employs a quantitative survey method with the application to university students in Jordan. The independent variable of the present study is social media marketing education whereas the dependent variable is students' financial decision-making skills and consists of many dimensions; they are Financial knowledge, Budgeting skills, Saving behavior, Investment knowledge, Risk assessment, Financial planning, and Confidence in decisions. It is expected that the present research

will add to the literature by consolidating concepts from financial literacy, digital marketing education and taking into account the Social Cognitive Theory and the Theory of Planned Behavior. Moreover, it is expected that it will offer recommendations at the level of curricula design, policies development and dissemination of responsible financial behavior among university students.

Keywords: Social media marketing education, financial decision-making skills, financial literacy, university students, Jordan, higher education, digital marketing, financial behaviour.

INTRODUCTION

A. Background of the Study

Digital technologies have revolutionized the way information is sought, people communicate, learn, and make decisions. As part of these technologies, social media has become the most prominent aspect of our daily lives, and most especially, to young adults and university students. Social media have been expanded beyond social interaction and now as for sources of educational knowledge, information about finances, marketing communication and consumer information. Therefore, the influence on students became more significant regarding their understanding of various products, services, investments, spending and financial decisions in general in the context of social media (Pandey & Guillemette, 2024).

In Jordan, social media use has become an integral part of the lives of young people and university students. The literature that looked at the use of social media by Jordanian students revealed that social media plays a major role in communication, education and information sharing (Hatamleh, 2024). Recent research based on Jordanian universities also found that social media is a dominant component of students' daily lives and their education (Taha et al., 2025). Likewise, studies have shown that university students are significantly influenced by social media in terms of their behavior, involvement and information access in Jordan (Alhajjaj et al., 2025). As students have increasingly come to rely on digital platforms, new opportunities arose for higher education institutions to embed social media-related knowledge and skills in their curricula.

Similarly, digital marketing has become one of the crucial aspects in business education and is essential for every organization when it comes to communication with customers, product promotion and brand building through the usage of social media platforms. Thus, most of the universities have started to offer courses on digital marketing and social media marketing in business and management related studies to prepare students for the digital environment. Through education of social media marketing, students acquire the necessary knowledge of customer behavior on social media, content generation, digital analytics, digital communication and customer engagement methods (Pawar, 2024). Also in Jordan, digital marketing initiatives and social media marketing strategies have increased and been used for supporting learning and involvement of students in universities (Alshaketheep et al., 2024). Empirical evidence on the increasing role of digital marketing and social media communication in higher education institutions in Jordan also exists (Al-Dmour et al., 2024).

This rise in digital marketing education is becoming ever more important since students are growing in a more digitally influenced financial setting. Jordan's financial sector has undergone an extreme makeover, driven by financial technology, digital payments, and online financial services (Al-Afeef et al., 2024). Further, financial technology is continuing to revolutionize the financial landscape and access to economic life (Almahadin et al., 2025). With digital financial services becoming more widespread, young adults must have greater financial literacy and knowledge of financial decision-making skills in order to make rational choices.

Financial literacy has been acknowledged as an issue of national priority in Jordan. Jordan's Central Bank has declared in the National Financial Inclusion Strategy (2023-2028) the importance of improving financial knowledge and skills of citizens for greater financial inclusion and economic development (Central Bank of Jordan, 2024). Also, various financial literacy programs targeting Jordanian youth have revealed that youth require an enhanced knowledge and responsible financial behavior (Wyss et al., 2022). Studies focusing on Jordanian youth have shown that financial literacy positively influences financial inclusion and financial well-being (Aqel et al., 2024) and that financial literacy has a strong influence on financial inclusion and financial capability of young people in Jordan (Al-Smadi, 2024).

With the emergence and overlap of social media marketing and financial decision-making, it appears that education on social media marketing may have a positive impact on the development of financial decision-making abilities of university students since they are exposed to financial news, investment articles, consumer reports, budget tips, and marketing information on social media platforms (Singh & Chakraborty, 2024). Studies indicate that students may improve digital financial literacy through education and availability of financial content (Baranidharan et al., 2023) and that social media contributes to learning of financial literacy through the facilitation of information exchange and knowledge sharing (Shvahaer et al., 2021).

Given the rise in importance of both social media marketing education and financial literacy, it becomes necessary to analyze the connection between the two factors within Jordanian higher education institutions.

B. Research Problem

Given the growing significance of both social media marketing education and financial literacy, few studies have explored the extent to which social media marketing education enhances students' financial decision-making skills in university context. Prior studies have focused on how social media impacts consumer behaviour, investment decisions, financial literacy and educational achievements individually (Rodriguez et al., 2024). Yet, to what degree does exposure to education in social media marketing contribute to enhanced financial decision-making skills remain a gray area.

Social media has a role to play in shaping investment decisions, spending behavior, attitude towards financial products (Tandon et al., 2021), an information provider for financial services, and also a channel of financial knowledge and advice to many users (Pandey & Guillemette, 2024). But how the educational aspect of social media marketing can help students improve financial decision making skills has been rarely explored.

Another gap in research context is the one of Jordan. Despite having researches regarding financial literacy, digital transformation, usage of social media and digital marketing in Jordan, very few researches has concentrated on the link between social media marketing education and financial decision making skills in Jordanian university students (Aqel et al., 2024). So there is a need for a research which fulfills this requirement.

C. Research Objectives

The objectives of this study are as follows:

1. To investigate the link between social media marketing education and students' financial decision-making skills in higher education institutions of Jordan.
2. To identify which factors lead to students' financial decision making behaviors.
3. To measure the effectiveness of social media marketing education programs at universities in Jordan.
4. To develop a theoretical framework to account for how social media marketing education leads to financial decision-making skills.

D. Research Questions

The research questions which the study seeks to answer are:

1. Does social media marketing education promote students' financial decision making skills in university students in Jordan?
2. Which learning variables influence quality of student financial decisions most?
3. Which variables impede effectiveness of social media marketing education in higher education institutions in Jordan?

E. Significance of the Study

Academic Significance

This study adds to the ongoing work done regarding social media marketing, financial literacy and financial behavior in the field of academia. It has been argued that although these fields are connected to each other, very few researches explore the linkage in university context. It draws on the theory of planned behavior and social cognitive theory to explain how education leads to the financial behavior and decisions (Ajzen, 2020). Results can further contribute to the development of financial decision making theories in students.

Practical Significance

This study has important practical implications for students, educators and administrators at universities. If the association between social media marketing education and financial decision-making is established, it may provide some guidelines for educators in designing learning experiences for the students which aim at enhancing both their digital skills and financial literacy. There has been evidence of the efficacy of social media-based learning in developing students' knowledge sharing skills, learning ability, self-efficacy (Sivakumar et al., 2023), so self-efficacy based interventions can improve students' confidence to make financial decision (Hinduja et al., 2024).

Policy Significance

This study is highly relevant for policymakers and educational authorities in Jordan as the country is focusing a lot on financial inclusion, financial literacy, digital transformation and technological innovation (Central Bank of Jordan, 2024). Results from this study will help in curriculum designing with regard to the integration of financial literacy and social media marketing education in higher education courses so that graduates are well equipped to take part in the changing Jordanian digital economy.

II. SOCIAL MEDIA MARKETING EDUCATION IN JORDANIAN HIGHER EDUCATION INSTITUTIONS

A. Concept of Social Media Marketing Education

The definition of social media marketing education is a course that deals with developing a broad knowledge and skillful abilities pertaining to all uses of social media marketing for marketing communication, customer relation, brand building, as well as digital business. Social media marketing education combines both a theoretical knowledge of its strategy, application in business environment and its practical application (Jamil et al., 2022).

Digital marketing education has experienced the influence of technical innovation and change in consumer behaviour. The need of training students in digital work place has become crucial for many universities, as social media has played an inseparable part of the digital communication strategy in business (Pawar, 2024). The subject matter in digital marketing education consists of creation of content, interactions and engagement with the audience, analyze social media, online behavior of the consumer and digital marketing campaign management.

The subject of digital marketing has been adopted in many Jordanian higher education institutions as universities started to utilize social media for their recruitment purposes and building their presence (Al-Abdallah et al., 2025). As the practice of digital marketing spread, the necessity of education related to social media marketing becomes clear.

B. Role of Social Media Marketing Education

The following four functions for the social media marketing education.

It helps students build digital competencies; the social media marketing education allows students to obtain practical competencies related to digital communication, content management, interpretation of data and engagement with people. Digital competencies become of critical importance in digital work place (Alshaketheep et al., 2024).

It helps students learn the behavior of consumers; the students study how consumers seek information, evaluate alternatives and buy products by examining consumer's interaction on social media marketing platforms, as well as consumer behavior. (Jamil et al., 2022)

It could provide students with financial literacy; since students are exposed to financial trends, spending habits, prices, investments and market dynamics, students are likely to improve financial literacy and budgeting skills. (Baranidharan et al., 2023)

It can lead to enhancement of entrepreneurial thinking in students; because students know that they can use digital marketing platform to grow business and have financial security, so they tend to think like entrepreneur by acquiring the decision-making abilities about the financial plans of the business and strategy (Atiyat et al., 2025).

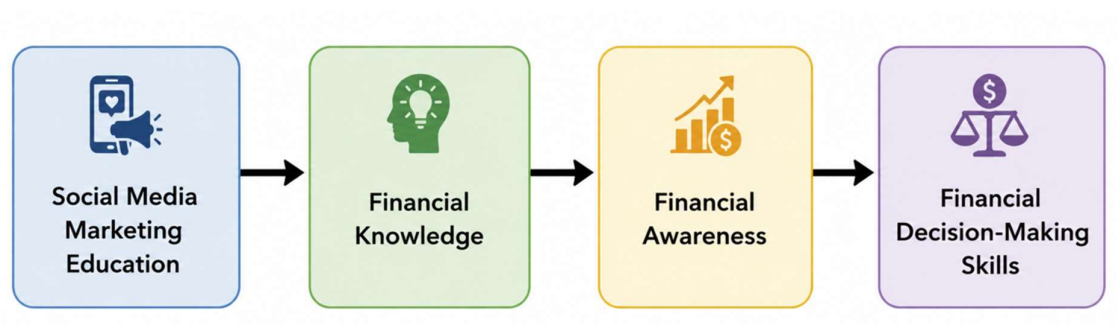


Figure 1: Relationship between Social Media Marketing Education and Financial Decision-Making Skills

C. Characteristics of Social Media Marketing Education

D. Limitations and Challenges

Table 1

Limitations of Social Media Marketing Education in Jordan

Limitation	Description
Curriculum gaps	Limited financial integration
Resource constraints	Lack of digital tools
Faculty expertise	Need for specialized training
Practical exposure	Limited industry collaboration
Technology adoption	Uneven implementation

Table 2

Educational Problems Arising from These Limitations

Limitation	Impact on Students
Curriculum gaps	Weak financial analysis
Limited practice	Poor decision-making confidence
Resource limitations	Reduced skill development

III. FINANCIAL DECISION-MAKING SKILLS OF UNIVERSITY STUDENTS

A. Financial Decision-Making Problems

Decision-making skill concerning finances have been of greater importance among university students as university students operate within the environment which has features of financial services digital transactions, social media influence, and increase in the financial choices of opportunities and that a successful financial decision maker takes time to manage their money, analyze choice, weigh risks and make informed decisions that will lead to the enhancement of their overall financial health (Lim & Weissmann, 2023).

Budgeting is one of the prevalent difficulties faced by university students as university students strive to meet their university fees, their expenditures, the expenses of transportation, and other related financial issues. Studies dealing with financial behaviour have found that effective budgeting practice play a role in promoting healthy financial habits and averting financial problems (Patel & Nayak, 2024), as such poor budgeting practices results in stress and poor financial condition.

Spending behaviour is another of the prevalent difficulties that is being faced by university students as social media is often inundated with marketing related materials from companies, brand promotions

of items through social media influencers and product advertisements that directly target consumer behaviour thus this practice can make university students spend more impulsively as social media has a significant influence on students' spending behavior and consumers' perception of products and services (Rodriguez et al., 2024). It does thus influence consumer perceptions on products and spending on them.

Awareness of investments has been one of the challenges that students are likely to experience as there has been a rapid increase in available information about how to invest online. Social media has also started acting as a medium of exchanging investment related data and advices, affecting consumer perception regarding the advantages and dangers associated with investing (Pandey & Guillemette, 2024). The lack of sufficient investment knowledge is likely to cause students to fall into a situation of poor financial decisions as they gain poor investment insight from unreliable resources.

Credit management also plays a vital role in financial difficulties. Students have lack of knowledge when it comes to credit and debts as well as financial obligations and lack of investment management. Having a thorough understanding of the financial matters and loan and credit obligations of individual would result in sound judgment when taking out credit.

Financial planning, also being a critical part in the students' finances as well has the need of financial planning among university students, as Financial planning may be defined as the act of managing individual's finances with the goal of achieving future objectives such as those related to income, expenditures, savings and investment. The effect of financial planning behaviour contributes positively toward the increase of students' financial satisfaction, well-being and security (Ferah & Sumer, 2023). However students may not have experience in designing financial planning.

B. Factors Affecting Financial Decision-Making

Individual Factors

Among the determinants of financial decision making quality is Financial Literacy that stands out as being one of the most influential factors; people with strong financial literacy skills are more prone to make well-reasoned decisions. Studies performed in Jordan confirm that Financial Literacy have positive impacts on Financial Inclusion and financial well-being of young people (Aqel et al., 2024), and likewise, for university students in Jordan financial literacy enhance the effectiveness of Financial Participation and Financial Decision Making (Al-Smadi, 2024).

Another important variable affecting students' financial behavior is the motivation to gain financial knowledge, which lead students to seek further information and make further attempts at understanding and applying finance related knowledge into practice, also this variable has something to do with Self Efficacy. Self-efficacy is another variable that may influence financial decision making because of its impact on an individual's confidence in their capabilities to perform an activity, in this case financial decisions. (Hinduja et al., 2024)

Self control is also an important variable as good decisions regarding financial matters requires delayed gratification, where students tend to sacrifice immediate gratification for more desirable future consequences. Self-control plays a vital role when students make decision related to saving, spending and managing budget.

Educational Factors

Education also impacts how students' decision making related to finances are performed; Marketing Knowledge affects students by helping them better understand consumer behavior, Financial communication, and the market effects impacting decision making of consumer products and services.(Jamil et al., 2022), Financial Education courses also are part of the education factor as it affect the level of financial literacy and students financial behavior (Nkwantabisa & Owusu-Acheampong, 2024).

Digital literacy is a new factor because nowadays individuals access financial information online. This has made Digital Literacy more important to assess financial information on online resources, digital finance knowledge and utilization of digital financial tools.

Social Factors

Social influences is another major factor influencing students' behavior toward finances, with Peer influence in which the decisions of fellow students might influence choices on spending, saving and investments as most students at university are regularly exposed to each other through their social circles and the interaction within it, Family Background will also influence attitudes towards finances due to family upbringing, values and financial experiences.

The influence of social media becomes more relevant in our day. Studies found that social media impact significantly students' financial literacy, spending behaviors, investment decision making, and financial products attitude. (Shvahr et al., 2021). So students who view financial information on their social media can be affected in both positive and negative manner due to the quality of information given on those sources.

Economic Factors

Students' Financial Decision making is also impacted by students' level of income because income level is a primary indicator that could determine whether students have adequate funds available for saving, spending, and investing; also the Students' employment status has some influence on Financial Decision Making by provide students with financial resource. The current economic situations in Jordan also have an impact of how students' finances are dealt with by The Jordanian National Strategy for Financial Inclusion, Promoting digital payments and Financial Literacy. (Central Bank of Jordan, 2024). In addition, Financial Technology and digital financial services add on the importance of having high level of financial literacy and strong financial decision making skills (Al-Afeef et al., 2024).

C. Challenges in Developing Financial Decision-Making Skills

Although access to financial information is now relatively easy, there are still various obstacles hindering the development of skills in financial decision making among university students:

The overload of information is one issue. Information about personal finance is widely available on many online sites and platforms such as social media, web apps and online communities. Having vast amount of information may pose a difficulty to search and determine relevant and credible source of information.

Misinformation on social media is also another issue. The accessibility of financial knowledge on social media can result in spread of misinformation about financial management and investment. Studies focusing on the impact of social media usage on financial decision making pointed out on issues like reliability of investment advices and recommendations from online platforms (Singh & Chakraborty, 2024).

The lack of structure financial training is a key concern to many students. The amount of financial education programs has been constantly on the rise; nevertheless, there is still a relatively limited scope in developing practical skills in managing money for young people via formal programs (Wyss et al., 2022).

Limited practical experiences in finance is also a constraint in enhancing financial decision making skills. Financial decision-making skills are honed by experiencing them in real life. Many students only obtain limited practical experience in managing their own budget, making investments, financial planning or in credit management before their participation in workforce.

Research Direction	Focus
Financial literacy	Knowledge development

Digital marketing education	Skill enhancement
Social influence	Behavioral effects
Financial behavior	Spending and saving patterns

Table 3: Summary of Research Directions on Financial Decision-Making Skills

IV. IMPACT OF SOCIAL MEDIA MARKETING EDUCATION ON FINANCIAL DECISION-
MAKING

A. Educational Objectives

Financial decision making skills through social media marketing education. Financial literacy education not only strengthens the marketer knowledge and skill sets but it can also influence the students financial decision making ability by developing their understanding on digital markets, consumer behaviour, financial information, and business performance. In the higher learning context, social media marketing education influences several educational goals closely linked to financial competence. One of the goal that could be achieved is the improvement of financial literacy. Financial literacy is the ability of individuals to comprehend financial concepts and the ability of individuals to apply financial knowledge to decision making. Higher level of financial literacy has been found to be related to greater financial well-being, inclusion and decision outcomes (Aqel et al., 2024). A rich stream of financial information, educational content and investment discussions is available in social media platforms that, if used in the education process, could enhance financial knowledge (Shvaher et al., 2021). Social media have been seen as a key channel to improve digital financial literacy among youth (Baranidharan et al., 2023). The second educational goal is the reinforcement of analytical decision making. In social media marketing education students are exposed to the process of analysis on consumer behaviour, marketing performance analysis, interpretation of digital data, and evaluation of campaigns. The analysis process helps in stimulating critical decision making and evidence based practice. This skill is very crucial for financial planning and investment decisions (Lim & Weissmann, 2023). Thirdly, it is the improvement of budgeting skills. Personal budgeting skills are related to resource management. By doing budgeting, students gain insights on managing their financial resources and assessing financial consequences of their choices and preferences. Financial planning skills might be fostered in budgeting assignments and exercises as students would learn to assess potential resource allocations and expected outcomes of these activities. These activities can contribute to enhance the students’ financial decisions and confidence in budgeting. The fourth goal is to develop investment awareness. Social media is a potential channel to source for financial information and investment related content among students (Pandey & Guillemette, 2024). Social media usage has been shown to play a key role in the development of investment decisions and financial attitude (Singh & Chakraborty, 2024). Social media marketing education would provide students with understanding on how the digital information sources influence investment decisions, enabling students to develop critical approaches towards the received investment advice. Fifth, the goal is to foster financially responsible behaviour. Following the Theory of Planned Behavior (Ajzen, 2020), education might strengthen intentions and behaviors as it has the potential to increase perceived knowledge and attitude and Perceived behavioral control. Financial knowledge, decision making confidence, would contribute to financial responsible behaviors like saving, budgeting, and long-term planning (She et al., 2024).

B. Educational Mechanisms and Learning Strategies

Social Media Analytics

Social media marketing education may yield positive effects on financial decision making ability depending on the employed learning strategies in higher learning institutions. Various mechanisms can contribute in improving the students' financial decision making skills. Social Media Analytics This mechanism is one of the most important ones in current digital marketing education. Social media analytics refers to the activities of collecting, managing, interpreting and analyzing digital data retrieved from the social media platforms, thus to develop critical and informed financial decisions. The interpretation of data, a core analytical skill, can facilitate many financial decisions in which the individuals have to consider the data before making a choice. By doing the social media analytics such as analyzing engagement data, consumer behavior, campaign performance data, students acquire experience in analyzing numeric data and drawing useful inferences from them. Also, consumer trend analysis helps in students' financial decision making as social media marketing education involves exposing students to the real time, changing consumer behavior, spending patterns, and market conditions and hence to some economic phenomena that would affect the financial situation of both personal and organisation level (Jamil et al., 2022).

Marketing Simulations

Marketing Simulations Marketing simulations can be used in the context of social media marketing education as controlled learning environments. A commonly used marketing simulation in this context would involve a budgeting aspect which students need to allocate resources among different marketing activities taking into account possible outcomes. Budgeting is quite similar to personal finance budgeting whereby students learn to prioritize the task and choice of available resources taking into account future spending needs and financial limitations. Campaigns simulation enhances students' financial planning by developing their financial performance management skills whereby they learn how marketing expenditure leads to profits and the impact of financial resource in affecting outcomes.

Practical Projects

Practical Projects This mechanism is vital for social media marketing education as practical activities have a great importance in enabling learning. Previous studies suggest that the social media based collaborative learning enhances knowledge sharing, learning effectiveness and skill acquisition among students (Ahmad et al., 2022) and facilitates knowledge sharing (Sivakumar et al., 2023). Digital business planning is a very valuable activity for students, which involves planning of innovative business idea considering its financial viability and profitability, thus students learn to critically assess costs, potential revenues and business opportunity. Social media campaign project allows students to plan and implement the marketing plan on social media, monitor the plan and evaluate the effectiveness of the marketing activities by taking into account the related costs and benefits.

Financial Integration

Financial Integration This mechanism involves the explicit integration of financial concepts in marketing education so that students understand financial implications arising from marketing decisions. Examples of this mechanism would be the activity of comparing the return with cost incurred by activities (Cost-benefit analysis) that promotes prudent decision making. Evaluating return on investment (ROI) provides students with the knowledge that they should assess opportunities on how much return generated from investment, thus strengthening financial planning skill.

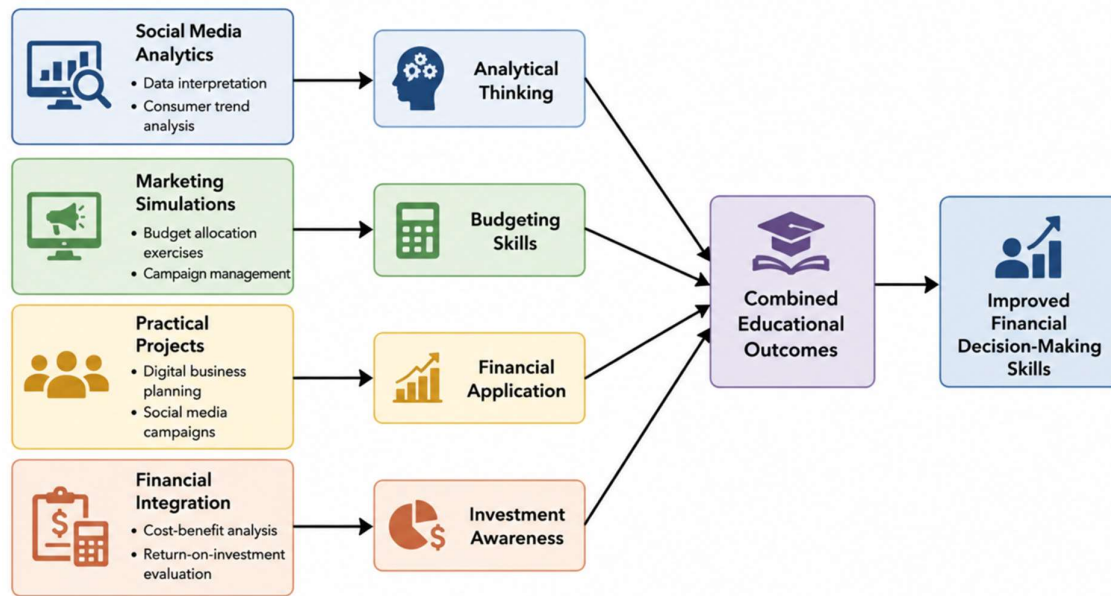


Figure 2: Educational Strategies Supporting Financial Decision-Making Skills

C. Educational Assessment and Evaluation

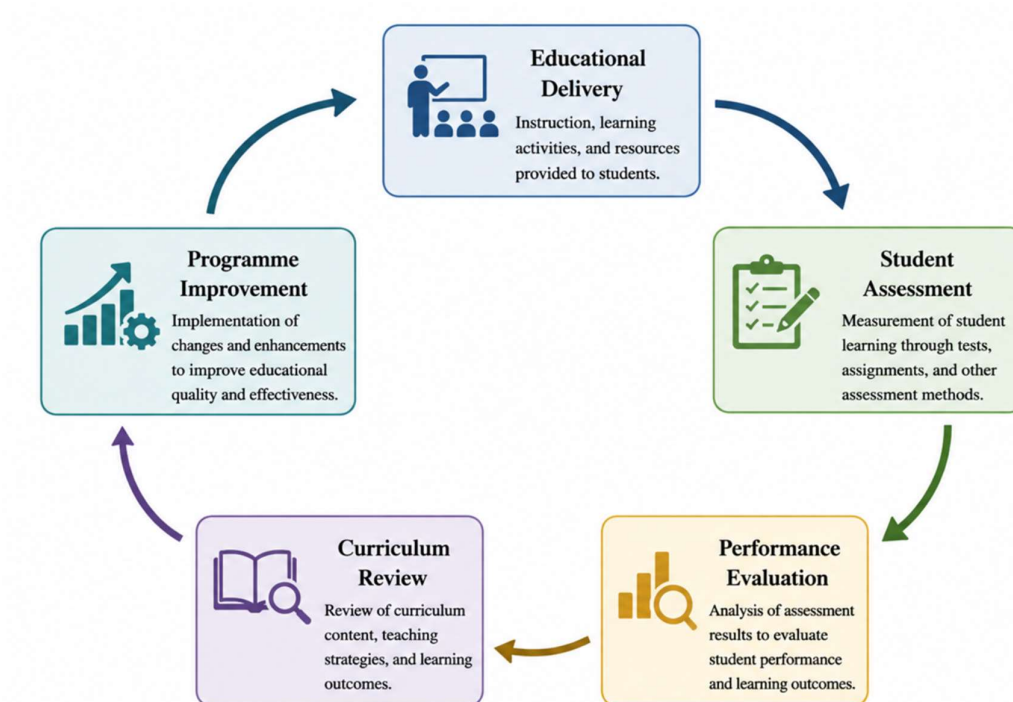


Figure 3: Educational Assessment Lifecycle

V. ANALYTICAL RESULTS AND CONCEPTUAL FRAMEWORK

A. Financial Decision-Making Metrics

In order to investigate the effect of social media marketing education on financial decision-making skills, a multidimensional measurement framework is proposed. The students' financial decision-making skills should be measured in multiple dimensions, as found in the financial literacy and financial behavior literature.

First, students' financial knowledge, which is the extent to which students have financial knowledge (Nkwantabisa & Owusu-Acheampong, 2024). Second, students' budgeting skills (students' ability to manage monetary resources). Third, students' saving behavior (a characteristic behavior towards a more careful behavior). Fourth, students' investment awareness, which is the degree of students' awareness about investment and relevant risks. Fifth, students' risk assessment (a degree of students' assessment about the degree of risks involved in financial decisions). Sixth, students' financial planning, which is the degree of students' ability to set financial goals and plan financial future. The last dimension is the students' decision confidence, which indicates students' ability and the self-efficacy of making financial decisions and research has shown that self-efficacy has been widely implicated as a critical determinant of decisions and subsequent behavior (Liu et al., 2025).

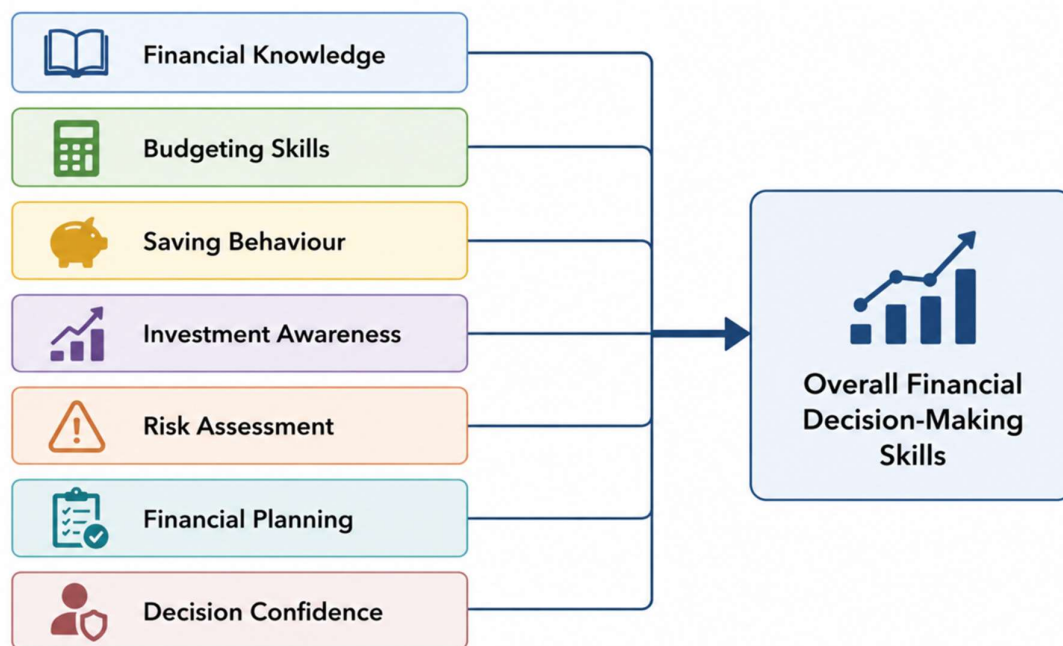


Figure 4: Financial Decision-Making Metrics Framework

B. Influencing Factors Framework

Educational Factors

Some factors may affect students' financial decision-making skills at the university level:

Educational factors include curriculum design, teaching expertise and practical learning opportunities. Quality education would enhance the ability to learn and acquire knowledge.

Technological Factors

Technology-related factors include social media, online learning and online educational tools. Digital technology helps to promote information dissemination, enhance involvement in education and develop financial literacy (Baranidharan et al., 2023).

Student Factors

Student-related factors include motivation, financial and digital literacy. Student motivation, self-confidence and a sense of self-efficacy encourage them to utilize educational knowledge better (Hinduja et al., 2024).

Institutional Factors

Institutional-related factors include university support, partnerships between institutions and businesses. Partnerships between university and businesses can make learning more practical and make it more consistent with actual needs.

Environmental Factors

Environment-related factors include the general economic condition in Jordan and the influence of society. The university student's attitude and behaviors are often shaped by parents, peers, and social media groups (Rodriguez et al., 2024).

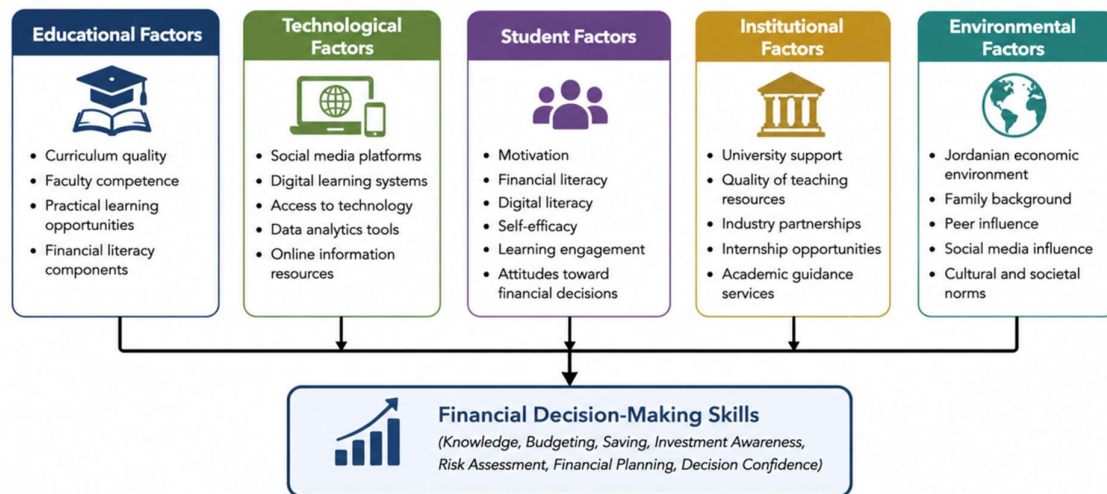


Figure 5: Influencing Factors of Financial Decision-Making Skills in Jordanian Universities

C. Proposed Framework

The Multiple-Layer Educational Impact Framework (MLEIF) has been developed to illustrate the impact of financial decision-making ability among university students in Jordan through social media marketing education.

The framework consists of nine interconnected layers:

- Layer 1: Educational Content
- Layer 2: Digital Learning Environment
- Layer 3: Social Media Marketing Knowledge
- Layer 4: Practical Marketing Experience
- Layer 5: Financial Literacy Development
- Layer 6: Financial Decision-Making Skills
- Layer 7: Student Behavioural Outcomes
- Layer 8: Institutional Support
- Layer 9: Socioeconomic Context of Jordan

The framework sort of pulls together knowledge from social cognitive theory, like learning through observation, building knowledge, and self-efficacy growth (Hoang et al., 2021), and also blends in theory of planned behavior to look at knowledge and attitude, which then shapes behavioral outcomes (Patel & Nayak, 2024)



Figure 6: Multiple-Layer Educational Impact Framework (MLEIF)

VI. CONCLUSION

A. Summary of Findings

This finding confirms that education in social media marketing could improve university students' financial decision-making capability. Education in social media marketing improves students' financial literacy, financial knowledge, financial analytical ability, budgetary management skills, financial investment skills and financial management habits. In addition, the practical and experimental teaching approaches develop financial proficiency and capability, as students can use their knowledge to practice. Besides, the result indicates that the university in Jordan could effectively improve students' financial behaviour through the revised curriculum, which incorporates financial literacy and digital marketing education.

B. Theoretical Contributions

This paper contributes to the previous research literature by bridging social media marketing education, financial literacy, and financial decision-making competence. Applying Social Cognitive Theory and Theory of Planned Behavior, this paper attempts to extend previous literature regarding both education and financial behavior. It also generates a conceptual framework about how educational experiences affect financial decision-making competence within a Jordanian context.

C. Practical Recommendations

It is essential that topics associated with financial literacy must be integrated within social media marketing and digital marketing courses at Jordanian universities. Jordanian universities must continue to increase the amount of industry-based projects students are exposed to and encounter, for financial and marketing-related tasks. Jordanian educational institutions must strengthen digital marketing labs and practices. Educational institutions in Jordan must not stand idle but rather, proactively foster positive financial management habits and enhance the promotion of financial awareness programs.

D. Future Research Directions

Future research should be a cross-university comparison among the universities in Jordan to find if there is any difference among these universities in terms of educational performance. A longitudinal study will be needed to demonstrate the change in financial decision-making skills over time. Moreover, the comparison between the universities in Jordan will be possible to be compared across Middle East countries to see how the teaching of social media marketing affects the financial decision-making in different learning and economical environment.

References

- Ahmad, S., Zeb, A., & Nisar, Q. A. (2022). Social media-based collaborative learning effects on student performance with moderating role of academic self-efficacy. *Frontiers in Psychology*, 13, Article 903919. <https://doi.org/10.3389/fpsyg.2022.903919>
- Ahmad, A. (2024). Ethical implications of artificial intelligence in accounting: A framework for responsible AI adoption in multinational corporations in Jordan. *International Journal of Data and Network Science*, 8(1), 401–414.
- Ahmad, A., Abusaimh, H., Rababah, A., Alqsass, M., Al-Olima, N., & Hamdan, M. (2024). Assessment of effects in advances of accounting technologies on quality financial reports in Jordanian public sector. *Uncertain Supply Chain Management*, 12(1), 133–142.
- Ahmad, A. Y. (2024). Firm determinants that influences implementation of accounting technologies in business organizations. *WSEAS Transactions on Business and Economics*, 21, 1–11.
- Ahmad, A. Y., Jain, V., Verma, C., Chauhan, A., Singh, A., Gupta, A., & Pramanik, S. (2024). CSR objectives and public institute management in the Republic of Slovenia. In *Ethical quandaries in business practices: Exploring morality and social responsibility* (pp. 183–202). IGI Global.
- Ahmad, A. Y. A. B. (2019). Empirical analysis on accounting information system usage in banking sector in Jordan. *Academy of Accounting and Financial Studies Journal*, 23(5), 1–9.
- Ahmad, A. Y. A. B. (2024, April). The changing role of accountants in the AI era: Evolving skill sets and career pathways. In *2024 International Conference on Knowledge Engineering and Communication Systems (ICKECS)* (Vol. 1, pp. 1–5). IEEE.
- Ahmad, A. Y. A. B. (2024, May). CS challenge in creating AI-integrated system. In *2024 4th International Conference on Advance Computing and Innovative Technologies in Engineering (ICACITE)* (pp. 1515–1520). IEEE.
- Ahmad, A. Y. A. B., Alzubi, J., James, S., Nyangaresi, V. O., Kutralakani, C., & Krishnan, A. (2024). Enhancing human action recognition with adaptive hybrid deep attentive networks and Archerfish optimization. *Computers, Materials & Continua*, 80(3).
- Ahmad, A. Y. A. B., Verma, N., Sarhan, N. M., Awwad, E. M., Arora, A., & Nyangaresi, V. O. (2024). An IoT and blockchain-based secure and transparent supply chain management framework in smart cities using optimal queue model. *IEEE Access*, 12, 51752–51771. <https://doi.org/10.1109/ACCESS.2024.3376605>
- Ahmad, A. Y. B. (2024). E-invoicing and cost reduction: A case study of multinational corporations. *Journal of Information Systems Engineering and Management*, 9(2), 25009.
- Ahmad, A. Y. B., Ali, M., Namdev, A., Meenakshisundaram, K. S., Gupta, A., & Pramanik, S. (2025). A combinatorial deep learning and deep prophet memory neural network method for predicting seasonal product consumption in retail supply chains. In *Essential information systems service management* (pp. 311–340). IGI Global.

- Ahmad, A. Y. B., Atta, A. A. B., Shehadeh, M. A. H. A., Baniata, H. M. A., & Hani, L. Y. B. (2023). Fund family performance: Evidence from emerging countries. *WSEAS Transactions on Business and Economics*, 20, 951–964.
- Ahmad, A. Y. B., Ayasrah, F. T., Allahham, M., Almajali, W. I., & AlArabi, K. (2024, December). The impact of AI on accounting technology adoption: The mediate role of business performance. In *Global Congress on Emerging Technologies (GCET-2024)* (pp. 218–224). IEEE.
- Ahmad, A. Y. B., Gongada, T. N., Shrivastava, G., Gabbi, R. S., Islam, S., & Nagaraju, K. (2023). E-commerce trend analysis and management for Industry 5.0 using user data analysis. *International Journal of Intelligent Systems and Applications in Engineering*, 11(11s), 135–150.
- Ahmad, A. Y. B., Gupta, P., Thimmiaraja, J., Goswami, B., Arun, M., Manoharan, G., & Younis, D. (2024). A comparison of the effects of robotics and artificial intelligence on business management and economics. In *Recent advances in management and engineering* (pp. 132–137). CRC Press.
- Ahmad, A. Y. B., Hannon, A., Al-Daoud, K. I., Abu-Alsondos, I. A., & Al-Qaisieh, M. S. (2023). Assessment of cloud based accounting technology adoption and business performance. *Kurdish Studies*, 11(3).
- Ahmad, A. Y. B., Kumari, D. K., Shukla, A., Deepak, A., Chandnani, M., Pundir, S., & Shrivastava, A. (2024). Framework for cloud based document management system with institutional schema of database. *International Journal of Intelligent Systems and Applications in Engineering*, 12(3s), 672–678.
- Ahmad, A. Y. B., Tiwari, A., Nayeem, M. A., Biswal, B. K., Satapathy, D. P., Kulshreshtha, K., & Bordoloi, D. (2024). Artificial intelligence perspective framework of the smart finance and accounting management model. *International Journal of Intelligent Systems and Applications in Engineering*, 12(4s), 586–594.
- Ahmad, A. Y. B., William, P., Uike, D., Murgai, A., Bajaj, K. K., Deepak, A., & Shrivastava, A. (2024). Framework for sustainable energy management using smart grid panels integrated with machine learning and IoT based approach. *International Journal of Intelligent Systems and Applications in Engineering*, 12(2s), 581–590.
- Ahmad, A. Y. B., Allahham, M., Almajali, W. I., Ayasrah, F. T., & Sabra, S. (2024, December). Blockchain's role in emerging markets: Accelerating digital supply chain management and unlocking new opportunities. In *2024 25th International Arab Conference on Information Technology (ACIT)* (pp. 1–6). IEEE. <https://doi.org/10.1109/ACIT62805.2024.10877053>
- Ahmad, A. Y. B., Allahham, M., Almajali, W. I., Ayasrah, F. T., & Sabra, S. (2024, December). Building trust: The role of strategic decision-making in digital market confidence. In *2024 25th International Arab Conference on Information Technology (ACIT)* (pp. 1–6). IEEE.
- Ahmad, A. Y. B., Allahham, M., Almajali, W. I., Ayasrah, F. T., & Sabra, S. (2024, December). From insights to impact: Business intelligence's influence on Jordan's industrial decision-making. In *2024 25th International Arab Conference on Information Technology (ACIT)* (pp. 1–5). IEEE.

- Ahmad, A. Y. B., Allahham, M., Almajali, W. I., Ayasrah, F. T., & Sabra, S. (2024, December). From interaction to action: How user input shapes logistics and decisions in Jordan's e-industry. In *2024 25th International Arab Conference on Information Technology (ACIT)* (pp. 1–6). IEEE. <https://doi.org/10.1109/ACIT62805.2024.10877225>
- Ahmad, A. Y. B., Allahham, M., Almajali, W. I., Ayasrah, F. T., & Sabra, S. (2024, December). Smart logistics services: How artificial intelligence transforms decision-making. In *2024 25th International Arab Conference on Information Technology (ACIT)* (pp. 1–4). IEEE. <https://doi.org/10.1109/ACIT62805.2024.10876978>
- Ahmad, A. Y. B., Allahham, M., Almajali, W. I., Ayasrah, F. T., & Sabra, S. (2024, December). Supply chain innovation on acceleration decision-making: The mediating role of tech and integration in the retail sector. In *2024 25th International Arab Conference on Information Technology (ACIT)* (pp. 1–6). IEEE. <https://doi.org/10.1109/ACIT62805.2024.10876940>
- Al-Afeef, M. A. M., Fraihat, B. A. M., Alhawamdeh, H., Hijazi, H. A., Al-Afeef, M. A., Nawasr, M., & Rabi, A. M. (2023). Factors affecting Middle Eastern countries' intention to use financial technology. *International Journal of Data & Network Science*, 7(3).
- Al-Ayyaf, A. I., & Al-Nsour, I. A. (2024). Effect of innovation in communication message on financial customer relationships: New evidence from Saudi Arabia. *Journal of Asian Business Strategy*, 14(1), 61–69. <https://doi.org/10.55493/5006.v14i1.5054>
- Al-Dweiri, M., Ramadan, B., Rawshdeh, A., Nassoura, A., Al-Hamad, A., & Ahmad, A. (2024). The mediating role of lean operations on the relationship between supply chain integration and operational performance. *Uncertain Supply Chain Management*, 12(2), 1163–1174.
- Al-gharaibeh, S. M., Al-Zoubi, D. M., Hijazi, H. A., Al-Sakarneh, A., Alhawamdeh, H. M., & Al-Afee, M. (2021). The relationship between e-learning during coronavirus pandemic and job burnout among faculty members in public and private universities in Jordan. *International Journal of Academic Research in Business and Social Sciences*, 11(11), 1983–2011.
- Al-Adaileh, A., & Alshawawreh, J. (2021). Measuring digital transformation impact in Saudi Arabia: A proposed framework. *Journal of Innovations in Digital Marketing*, 2(1), 14–26.
- Alawneh, O. M., Allahham, M., Habeeb, A. F. H., Almajali, W., Al-Nsour, I. A., & Jawabreh, O. (2025). Evaluating how big data analysis mediates the impact of digital marketing strategies on tourism development in Jordan. *GeoJournal of Tourism and Geosites*, 62, 2053–2062. <https://doi.org/10.30892/gtg.62405-1571>
- Albashtawi, Z., Alnsour, I. R., Al-Nsour, I. A., Allahham, M. I., & Jawabreh, O. (2025). The role of big data analytics in developing logistics within renewable energy systems: The moderating role of engineering solutions. *Lex Localis - Journal of Local Self-Government*, 23(S2), 273–293. <https://doi.org/10.52152/>
- Albataineh, A. (2025). The effect of smart contracts (blockchain technology) on Saudi Arabia's land registry and survey department for sustainable development. *Discover Sustainability*, 6(1). <https://doi.org/10.1007/s43621-025-00797-7>

- Ali, O., Al-Duleemi, K., Al-Afeef, D. J., & Al-hawamdah, D. H. (2019). The impact of the decisions of the COBIT 5 committee on the effectiveness of the internal control systems in the Jordanian industrial joint stock companies. *The Journal of Social Sciences Research*, 5(11), 1587–1599.
- Alhawamdeh, A. M., Al-habash, M. A., Zraqat, O., Hussien, L. F., Taha, I. B., Alhawamdeh, H., & Alkhawaldeh, B. Y. (2023). The effect of religious and ethnic values on executive compensation in Jordanian firms. *KEPES*, 21(3), 604–622.
- Alhawamdeh, H. M. (2020). The intermediate role of organizational flexibility in the impact of using information technology on the efficiency of the application of IT governance in Jordanian industrial companies. *Modern Applied Science*, 14(7).
- Alhawamdeh, H. M., & Alsmairat, M. A. (2019). Strategic decision making and organization performance: A literature review. *International Review of Management and Marketing*, 9(4), 95.
- Alhawamdeh, H., Abdel Muhsen Irsheid Alafeef, M., Abdel Mohsen Al-Afeef, M., Alkhawaldeh, B. Y., Nawasra, M., Al-Rawashdeh, H. A. A., ... & Al-Eitan, G. N. (2024). The relationship between marketing capabilities and financial performance: The moderating role of customer relationship management in Jordanian SMEs. *Cogent Business & Management*, 11(1), 2297458.
- Alhawamdeh, H., Al-Eitan, G. N., Hamdan, M. N., Al-Hayek, Y. A. M., Zraqat, O., Alhawamdeh, A. M., & Alkhawaldeh, B. Y. (2023). The role of financial risk tolerance and financial advisor management in mediating the relationship between financial attitudes, financial knowledge, financial anxiety, and sustainable financial retirement planning. *Journal of Namibian Studies*, 33, 5071–5100.
- Alhawamdeh, H., Alkhawaldeh, B. Y., Zraqat, O., & Alhawamdeh, A. M. (2024). Leveraging business intelligence in organizational innovation: A leadership perspective in commercial banks. *International Journal of Academic Research in Accounting, Finance and Management Sciences*, 14(1), 295–309.
- Alhawamdeh, H., Al-Saad, S. A., Almasarweh, M. S., Al-Hamad, A. A. S., Ahmad, A. Y., & Ayasrah, F. T. M. (2023). The role of energy management practices in sustainable tourism development: A case study of Jerash, Jordan. *International Journal of Energy Economics and Policy*, 13(6), 321–333. <https://doi.org/10.32479/ijeeep.14724>
- Alkarabsha, F. I., Alwashah, M. A., & Alsharayri, M. (2023). The impact of corporate tax evasion on the budget revenue decline: A case study Saudi Arabia's overall budget. *International Journal of Applied Sciences & Development*, 2, 90–100. <https://doi.org/10.37394/232029.2023.2.10>
- Alkhawaldeh, A., Al-Shaer, B., Aleissa, T. Y. A., Abubaker, J. Y., Alwahshat, Z. M., Bani Ahmad, A. Y., & Dahbour, S. A. (2024). The role of the Belt and Road Initiative in increasing China's influence in the world (2013–2023). *International Journal of Interdisciplinary Social & Community Studies*, 19(2).
- Alkhawaldeh, B. Y. S., Alhawamdeh, H., Almarshad, M., Fraihat, B. A. M., Abu-Alhija, S. M. M., Alhawamdeh, A. M., & Ismaeel, B. (2023). The effect of macroeconomic policy uncertainty on environmental quality in Jordan: Evidence from the novel dynamic simulations approach. *Jordan Journal of Economic Sciences*, 10(2), 116–131.

- Alkhawaldeh, B. Y., Alhawamdeh, H., Al-Afeef, M. A. M., Abu-Alhija, S. M. M., Al-Rawashdeh, H. A. A., Mustafa, S. M. B., ... & Almarshad, M. (2023). Mediating effect of financial behaviour on the influence of financial literacy and financial technology on financial inclusion development in Jordanian MSMEs. *Journal of Hunan University Natural Sciences*, 50(3).
- Alkhawaldeh, B. Y., Alhawamdeh, H., Al-Shukri, K. S., Yousef, M., Shehadeh, A. Y. A., Abu-Samaha, A. M., & Alwreikat, A. A. (2023). The role of technological innovation on the effect of international strategic alliances on corporate competitiveness in Jordanian international business administration: Moderating and mediating analysis. *Migration Letters*, 20(6), 282–299.
- Alkhawaldeh, B., Alhawamdeh, H., Al-Afeef, M., Al-Smadi, A., Almarshad, M., Fraihat, B., ... & Alaa, A. (2023). The effect of financial technology on financial performance in Jordanian SMEs: The role of financial satisfaction. *Uncertain Supply Chain Management*, 11(3), 1019–1030.
- AlKhawaldeh, B. Y. S., Al-Smadi, A. W., Ahmad, A. Y., El-Dalahmeh, S. M., Alsuwais, N., & Almarshad, M. N. (2024). Macroeconomic determinants of renewable energy production in Jordan. *International Journal of Energy Economics and Policy*, 14(3), 473–481.
- Alm, J., & Martinez-Vazquez, J. (2021). Tax evasion and the informal economy in developing countries. *Journal of Economic Policy Reform*, 24(3), 205–222.
- Almad, T., Alrawashedh, N. H., Alhawamdeh, H., Harahsheh, A. A., Zraqat, O., Hussien, L. F., ... & Alkhawaldeh, B. Y. (2024). The impact of strategic leadership on strategic performance in higher education institutions: The mediating role of change management.
- Allahham, M., & Ahmad, A. (2024). AI-induced anxiety in the assessment of factors influencing the adoption of mobile payment services in supply chain firms: A mental accounting perspective. *International Journal of Data and Network Science*, 8(1), 505–514.
- Allahham, M. A. H. M. O. U. D., Sharabati, A. A. A., Hatamlah, H. E. B. A., Ahmad, A. Y. B., Sabra, S., & Daoud, M. K. (2023). Big data analytics and AI for green supply chain integration and sustainability in hospitals. *WSEAS Transactions on Environment and Development*, 19, 1218–1230.
- Almarshad, M. N., Alwaely, S. A., Alkhawaldeh, B. Y., Al Qaryouti, M. Q. H., & Bani Ahmad, A. Y. (2024). The mediating role of energy efficiency measures in enhancing organizational performance: Evidence from the manufacturing sector in Jordan.
- Almestarihi, R., Ahmad, A. Y. A. B., Frangieh, R., Abu-AlSondos, I., Nser, K., & Ziani, A. (2024). Measuring the ROI of paid advertising campaigns in digital marketing and its effect on business profitability. *Uncertain Supply Chain Management*, 12(2), 1275–1284.
- Al Mawahreh, M. A. L., Alshar, M. M., Allahham, M., & Ahmad, A. Y. B. (2025, April). The impact of artificial intelligence on purchase intention, the mediating role of digital engagement. In *2025 1st International Conference on Computational Intelligence Approaches and Applications (ICCIAA)* (pp. 1–8). IEEE.
- Al-Nsour, I. (2019). Planning of marketing communication activities in Jordanian pharmaceutical companies using the balanced scorecard. *New Media and Mass Communication*, 77, 63–80.
- Al-Nsour, I. (2019). The role of sports sponsorship in improving brand equity: A study on the Saudi fans in Riyadh. *International Journal of Business Management*, 4(4), 97–113.

- Al-Nsour, I. (2020). Effect of brand enhancement on buying behavior towards the sport sponsorship companies in Riyadh, KSA. *International Journal of Business, Economics and Management*, 7(2), 110–119.
- Al-Nsour, I. (2022). Measuring the interaction among Jordanians via Facebook network: A proposed model for bridging the e-interaction gaps “IN Model”. *Turkish Journal of Computer and Mathematics Education*, 14(12), 1078–1101.
- Al-Nsour, I. (2022). The impact of the use of electronic social platforms on the pre-behavior of the Saudi buyer during the coronavirus pandemic. *Journal of Administrative and Economic Sciences, Qassim University*, 15(1), 102–132.
- Al-Nsour, I. (2023). The impact of social-media celebrity on buying behavior of retailer customers in Riyadh, KSA. *Jordan Journal of Business Administration*, 20(1). <https://doi.org/10.35516/jjba.v19i4.1719>
- Al-Nsour, I. (2024). Impact of social-media engagement and entertainment on the buying intention from online fashion stores in Jordan. *Jordan Journal of Business Administration*, 20(3). <https://doi.org/10.35516/jjba.v20i3.1014>
- Al-Nsour, I., & Alsahli, S. (2025). The brand involvement as a mediator between sports sponsorship and Jordanian audience behavior: Psychological-communication analysis. *Arab Journal of Administration*, 1–32. <https://doi.org/10.21608/aja.2025.404536.1897>
- Al-Nsour, I. A. (2013). Examine the relationship between internal marketing and internal service quality in Saudi public hospitals. *Research on Humanities and Social Sciences*, 3(19), 27–41.
- Al-Nsour, I. A. (2017). Effect of applying the marketing intelligence on enhancing innovation: Comparative study between productive and service sectors in Jordan. *Arab Journal of Administration*, 37(2), 219–246.
- Al-Nsour, I. A. (2017). WOM effectiveness in improving the purchasing behavior: Comparative study on the private hospitals inpatients in Jordan and Saudi Arabia. *Arab Economic and Business Journal*, 12(1), 13–28. <https://doi.org/10.1016/j.aebj.2017.04.003>
- Al-Nsour, I. A. (2018). Involvement degree of women in the buying decision of the Saudi family. *Arab Journal of Administration*, 38(4), 231–252. <https://doi.org/10.21608/aja.2018.22445>
- Al-Nsour, I. A. (2020). Effect of sales promotion programs on purchasing behavior at hypermarkets in Riyadh, KSA. *EPRA International Journal of Economic and Business Review*, 9(5), 507–518.
- Al-Nsour, I. A. (2022). The effect of sports sponsorship activities on the brand equity: A study on sports clubs and their fans in Jordan. *Jordan Journal of Business Administration*, 18(1), 123–144.
- Al-Nsour, I. A. (2023). Impact of political marketing mix on voting to the parliamentary candidate: A study on the Jordanian public trends towards the voting of the 19th parliament. *Jordan Journal of Business Administration*, 19(1). <https://doi.org/10.35516/jjba.v19i1.742>

- Al-Nsour, I. A. (2024). Building a model for e-interaction via Facebook platform: "The IN-IMSIU model for e-interaction". *Journal of Management World*, 2024(5), 348–362. <https://doi.org/10.53935/jomw.v2024i4.1120>
- Al-Nsour, I. A., & Al-Sahli, S. A. (2022). Effects of cash and non-cash communications on brand awareness: An empirical evidence from Saudi Arabia. *The Journal of Asian Finance, Economics and Business*, 9(5), 507–518. <https://doi.org/10.13106/JAFEB.2022.VOL9.NO5.0507>
- Al-Nsour, I. A., & Al-Sahli, S. A. (2024). Impact of value on customer retention of fast food restaurants in Saudi Arabia. *Arab Journal of Administration*, 44(3), 305–328. <https://doi.org/10.21608/aja.2023.202772.1420>
- Al-Nsour, I. A. A., & Al-Saleh, N. H. (2025). Impact of humor communication message elements on brand equity mediator for customer relationships: A study on fast food restaurant customers via the X platform in Saudi Arabia. *Arab Journal of Administration*, 1–24. <https://doi.org/10.21608/aja.2025.356476.1791>
- Al-Nsour, I. A., & Hasnin, E. A. H. (2024). Leveraging humor content in effective communications for the Saudi food industry. *Journal of Management World*, 2024(3), 170–184. <https://doi.org/10.53935/jomw.v2024i4.1103>
- Al-Nsour, I. A., Al-Nsour, I. R., & Al-Otoun, F. J. (2021). Enhancing customers' satisfaction using loyalty rewards programs: Evidence from Jordanian banks. *The Journal of Asian Finance, Economics and Business*, 8(11), 297–305. <https://doi.org/10.13106/JAFEB.2021.VOL8.NO11.0297>
- Al-Nsour, I. A., Athaydi, R. A., & Al Tamim, M. J. (2023). The effects of sports sponsorship on buying response for Jordanian fans. *Journal of Media & Management*, 5(4), 1–9.
- Al-Nsour, I. A., Hasnin, E. A., Almurad, H. M., & Allahham, M. I. (2024). The relationship between social media trust and purchase decision in the fashion industry. *Journal of Information Systems Engineering & Management*, 10(54s), 1012–1029.
- Al-Nsour, I. A., Tarofder, A. K., & Mhd Yusak, N. A. (2023). Impact of social media marketing on the buying intention of fashion products. *Res Militaris*, 13(3), 617–632.
- Al-Nsour, I., & Al-Shaibani, M. F. (2024). Effect of social media involvement on buyer behavior: Evidence from Jordan fashion market via Facebook platform. *Journal of International Crisis and Risk Communication Research*, 7(S12), 341–359. <https://doi.org/10.63278/jicrcr.vi.998>
- Al-Nsour, I., Somili, H., & Allahham, M. (2021). Impact of social networks safety on marketing information quality in the COVID-19 pandemic in Saudi Arabia. *The Journal of Asian Finance, Economics and Business*, 8(12), 223–231.
- Alnsour, I. R., Al-Nsour, I. A., Malkawi, E. M., & Allahham, M. I. (2025). The role of internet of things in fintech adoption within banking sector: The moderating role of digital transformation capability. *Lex Localis - Journal of Local Self-Government*, 23(S4), 2486–2510. <https://doi.org/10.52152/k4pew155>
- Al-Qahtani, M. A. A., & Al-Nsour, I. A. (2025). Leverage digital advertising to gain a competitive advantage for the beauty care centers in Riyadh. *Pakistan Journal of Life and Social Sciences*, 23(1), 1026–1046.

- Alshira'h, A. F., Alshirah, M. H., & Khassawneh, A. A. L. (2024). Forensic accounting, socio-economic factors and value added tax evasion in emerging economies: Evidence from Saudi Arabia. *Journal of Financial Reporting and Accounting*, 23(2). <https://doi.org/10.1108/JFRA-04-2023-0202>
- Ariyibi, K. O., Bello, O. F., & Adediran, O. F. (2024). The application of blockchain technology to improve tax compliance and ensure transparency in global transactions. *International Journal of Science and Research Archive*, 13(2), 1516–1527. <https://doi.org/10.30574/ijrsra.2024.13.2.2286>
- Ariyibi, K. O., Bello, O. F., Adediran, O. F., Phillips, A. P., Odumuwagun, O. O., & Kazeem, O. (2024). The application of blockchain technology to improve tax compliance and ensure transparency in global transactions. *International Journal of Science and Archive*. <https://doi.org/10.30574/ijrsra>
- Atzori, M. (2017). Blockchain technology and decentralized governance: Is the state still necessary? *Journal of Governance and Regulation*, 6(1), 45–62.
- Atta, A., Baniata, H., Othman, O., Ali, B., Abughaush, S., Aljundi, N., & Ahmad, A. (2024). The impact of computer assisted auditing techniques in the audit process: An assessment of performance and effort expectancy. *International Journal of Data and Network Science*, 8(2), 977–988.
- Ajzen, I. (2020). The theory of planned behavior: Frequently asked questions. *Human Behavior and Emerging Technologies*, 2(4), 314–324. <https://doi.org/10.1002/hbe2.195>
- Al-Abdallah, G., Dandis, A., & Eid, A. H. (2025). Exploring the mediating effect of digital versus traditional marketing communication on students' selection of higher education institutions in developing countries. *Human Behavior and Emerging Technologies*, 2025, Article 5510524. <https://doi.org/10.1155/hbe2/5510524>
- Al-Afeef, M. A., Alsmadi, A. A., & Al-Smadi, R. W. (2024). Transforming Jordan's financial landscape: The fintech evolution towards inclusive digital payments. In *Navigating the technological tide: The evolution and challenges of business model innovation* (pp. 281–296). Springer. https://doi.org/10.1007/978-3-031-67444-0_23
- Abu-Shaikha, M. F., Al-Karablieh, M. A., Musa, A. M., Almashayikh, M. I., & Al-Abed, R. Y. (2025). Integrating machine learning in digital architecture: enhancing sustainable design and energy efficiency in urban environments. *Asian Journal of Civil Engineering*, 26(2), 813–827. <https://doi.org/10.1007/s42107-024-01224-4>
- Abu-Shaikha, M., & Nasereddin, S. (2025). Predicting Media Impact: A Machine Learning Framework for Optimizing Corporate Communication Strategies in Architectural Practices. *International Journal of Computational and Experimental Science and Engineering*, 11(1), 827–831. <https://doi.org/10.22399/ijcesen.1032>
- Al-Kasasbeh, O., Al-Khazaleh, S. M., & Alsheikh, G. (2024). The Dynamic Impact of Environmental Sustainability, Green Finance, and FinTech on Energy Efficiency in Middle Eastern Economies. *International Journal of Energy Economics and Policy*, 14(4), 574–579. <https://doi.org/10.32479/ijeep.15691>
- AL-Sukhani, H., Bsoul, Q., Elhawary, A. H., Nasr, Z. M., Mansour, A. E., Batyha, R. M., Alqadi, B. S., Alqurni, J. S., Alfagham, H., & Madbouly, M. M. (2025). Multilingual Hate Speech Detection:

- Innovations in Optimized Deep Learning for English and Arabic Hate Speech Detection. *SN Computer Science*, 6(3). <https://doi.org/10.1007/s42979-025-03741-8>
- Almansour, B. Y., Elkrggli, S., & Almansour, A. Y. (2023). Behavioral finance factors and investment decisions: A mediating role of risk perception. *Cogent Economics and Finance*, 11(2). <https://doi.org/10.1080/23322039.2023.2239032>
- Alzghoul, A., & Al-Kasasbeh, O. (2024). The moderating role of information technology infrastructure in the relationship between fintech adoption and organizational competitiveness. *Investment Management and Financial Innovations*, 21(2), 155–166. [https://doi.org/10.21511/imfi.21\(2\).2024.12](https://doi.org/10.21511/imfi.21(2).2024.12)
- Bani Ahmad, A. Y. A., Ayasrah, F. T., Allahham, M., Almajali, W. I., & Alarabi, K. (2024). The Impact of AI on Accounting Technology Adoption the Mediate Role of Business Performance. *Global Congress on Emerging Technologies, GCET 2024*, 218–224. <https://doi.org/10.1109/GCET64327.2024.10934689>
- Elbehier, H., Fathi, H., Eassa, M., Abdelhafeez, A., Abdellah, M. R., & Mahmoud, H. (2025). Advanced Machine Learning Approaches for Breast Cancer Detection with Neutrosophic Sets. *Neutrosophic Sets and Systems*, 81, 273–284. <https://doi.org/10.5281/zenodo.14827225>
- Ibrahim, A., Almasria, N. A., Almaqtari, F. A., Al-Kasasbeh, O., Alhatabatb, Z., & Ershaid, D. (2024). The Impact of Green Finance, FinTech and Digital Economy on Environmental Sustainability: Evidence from Advanced Panel Techniques. *International Journal of Energy Economics and Policy*, 14(6), 621–627. <https://doi.org/10.32479/ijeep.17180>
- Zawaideh, F., Bsoul, Q., Alzoubi, A., Botros, N. T., Fawzy, M. T., Abdelminaam, D. S., & Mostafa, N. (2025). Optimized Machine Learning Framework for SMS Spam Detection and Classification: A Comparative Evaluation. *Fusion: Practice and Applications*, 18(1), 145–182. <https://doi.org/10.54216/FPA.180112>
- Al-Dmour, H., Al-Dmour, A., & Eid, A. (2024). The role of marketing mix and social media strategies in influencing international students' university choices in Jordan. *Journal of International Students*, 14(4), 642–663. <https://doi.org/10.32674/jis.v14i4.6407>
- Al-Smadi, M. O. (2024). *Financial literacy and financial inclusion among university students in Jordan* [Working paper]. Social Science Research Network. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4876495
- Alhajjaj, H. A., & colleagues. (2025). Social media and its impact on university students. *Education in Practice: International Journal of Education and Social Science*, 18, 492–510. <https://doi.org/10.22521/edupij.2025.18.492>
- Almahadin, H. A., Shehadeh, M., & Al-Gasaymeh, A. S. (2025). Financial technology platforms and enhancing SME financing in Jordan. *Discover Sustainability*, 6(1), Article 345. <https://doi.org/10.1007/s43621-025-01345-z>
- Alshaketheep, K., Mansour, A., Deek, A., Zraqat, O., & Asfour, B. (2024). Innovative digital marketing for promoting SDG 2030 knowledge in Jordanian universities in the Middle East. *Discover Sustainability*, 5(1), Article 219. <https://doi.org/10.1007/s43621-024-00419-8>

- Aqel, S., Al-Hamdan, M., & Zraqat, O. (2024). The impact of financial literacy on financial inclusion for financial well-being of youth: Evidence from Jordan. *Discover Sustainability*, 5(1), Article 704. <https://doi.org/10.1007/s43621-024-00704-6>
- Atiyat, R., Bani Atta, A. A., & Khalaf, L. (2025). Enhancing sustainable fintech education: Investigating the role of smartphones in empowering economic development in Jordan. *Discover Sustainability*, 6(1), Article 397. <https://doi.org/10.1007/s43621-025-01397-1>
- Baranidharan, S., Sankarkumar, A. V., Chandrakala, G., Narayanan, R., & Sathyanarayana, K. (2023). The role of social media in empowering digital financial literacy. In *Global perspectives on social media usage within governments* (pp. 80–96). IGI Global. <https://doi.org/10.4018/978-1-6684-7450-1.ch006>
- Central Bank of Jordan. (2024). *National financial inclusion strategy (2023–2028)*. Central Bank of Jordan. [https://www.cbj.gov.jo/EN/List/National Financial Inclusion Strategy 20232028](https://www.cbj.gov.jo/EN/List/National_Financial_Inclusion_Strategy_20232028)
- Ferah, G., & Sumer, S. (2023). Financial planning behaviour: A systematic literature review and new theory development. *Journal of Financial Services Marketing*, 28(4), 698–718. <https://doi.org/10.1057/s41264-023-00249-1>
- Hatamleh, I. M. (2024). Exploring the multifaceted influences of social media motivation on online relationship commitment among young adults in Jordan: An empirical study. *Human Behavior and Emerging Technologies*, 2024, Article 2510500. <https://doi.org/10.1155/2024/2510500>
- Hinduja, P., Mohammad, R. F., & Siddiqui, S. (2024). Factors influencing students' academic self-efficacy in related domains. *SAGE Open*, 14(4), 1–15. <https://doi.org/10.1177/21582440241289738>
- Hoang, T. G., Do, L. H., & Tran, T. Q. (2021). Social capital theory, social exchange theory, social cognitive theory, financial literacy, and the role of knowledge sharing as a moderator in enhancing financial well-being: From bibliometric analysis to a conceptual framework model. *Frontiers in Psychology*, 12, Article 664638. <https://doi.org/10.3389/fpsyg.2021.664638>
- Badawi, M., Alofan, F., Allahham, M., Sabra, S., Abubaker, N. M., & Ahmad, A. Y. B. (2024). The impact of supply chain agility on operationalizing sustainable procurement: The mediating role of system and process integration in the pharmaceutical sector in Saudi Arabia. *Evolutionary Studies in Imaginative Culture*, 1632–1650.
- Bani Ahmad, A. Y., Fraihat, B. A. M., Hamdan, M. N., Ayasrah, F. T. M., Alhawamdeh, M. M., & Al-Shakri, K. S. (2024). Examining the mediating role of organizational trust in the relationship between organizational learning and innovation performance: A study of information systems and computer science service firms.
- Bani Atta, A. A., Ali Mustafa, J., Al-Qudah, S. S., Massad, E., & Ahmad, A. B. (2023). The effect of macroprudential regulation on banks' profitability during financial crises. *Corporate Governance and Organizational Behavior Review*, 7(2), 245–258.
- Basha, M. H. (2024). Evaluating the impact of the public budget deficit on the money supply in the Saudi economy. *International Journal of Business and Management Invention*, 13, 79–86. <https://doi.org/10.35629/8028-13037986>

- Bin Khunin, L. K., & Al-Nsour, I. A. A. F. (2024). Impact of digital advertising strategies on the competitive advantage of SMEs in KSA. *European Journal of Business and Management Research*, 9(2), 91–98.
- Bird, R. M., & Zolt, E. M. (2022). Taxation and development: The weakest link? *International Tax and Public Finance*, 29(1), 1–18.
- Cheng, C., Ahmad, S. F., Irshad, M., Alsanie, G., Khan, Y., Ahmad (Ayassrah), A. Y. A. B., & Aleemi, A. R. (2023). Impact of green process innovation and productivity on sustainability: The moderating role of environmental awareness. *Sustainability*, 15(17), 12945. <https://doi.org/10.3390/su151712945>
- Chohan, U. W. (2019). Blockchain and public finance: A literature review. *Journal of Public Budgeting, Accounting & Financial Management*, 31(3), 385–395.
- Cong, L.-T. Q., Thuy, N. D. P., Nhi, H. T. N., & Anh, T. V. (2024). Blockchain-based electronic voting: Lessons from Estonia. *Vietnamese Journal of Legal Sciences*, 11(2), 27–39. <https://doi.org/10.2478/vjls-2024-0009>
- Crosby, M., Pattanayak, P., Verma, S., & Kalyanaraman, V. (2016). Blockchain technology: Beyond Bitcoin. *Applied Innovation Review*, 2, 6–10.
- Daoud, M., Taha, S., Al-Qeed, M., Alsafadi, Y., Ahmad, A., & Allahham, M. (2024). EcoConnect: Guiding environmental awareness via digital marketing approaches. *International Journal of Data and Network Science*, 8(1), 235–242.
- Daoud, M. K., Al-Qeed, M., Ahmad, A. Y. B., & Al-Gasawneh, J. A. (2023). Mobile marketing: Exploring the efficacy of user-centric strategies for enhanced consumer engagement and conversion rates. *International Journal of Membrane Science and Technology*, 10(2), 1252–1262.
- Daoud, M. K., Al-Qeed, M., Al-Gasawneh, J. A., & Bani Ahmad, A. Y. (2023). The role of competitive advantage between search engine optimization and shaping the mental image of private Jordanian university students using Google. *International Journal of Sustainable Development & Planning*, 18(8).
- Daoud, M. K., Alqudah, D., Al-Qeed, M., Al Qaied, B. A., & Ahmad, A. Y. A. B. (2023). The relationship between mobile marketing and customer perceptions in Jordanian commercial banks: The electronic quality as a mediator variable. *International Journal of Membrane Science and Technology*, 10(2), 1360–1371.
- Dong, S., Abbas, K., Li, M., & Kamruzzaman, J. (2023). Blockchain technology and application: An overview. *PeerJ Computer Science*, 9(1), e1705. <https://doi.org/10.7717/peerj-cs.1705>
- Feng, Y., Ahmad, S. F., Chen, W., Al-Razgan, M., Awwad, E. M., Ayassrah, A. Y. B. A., & Chi, F. (2024). Design, analysis, and environmental assessment of an innovative municipal solid waste-based multigeneration system integrating LNG cold utilization and seawater desalination. *Desalination*, 117848.
- Fouzdar, A. S., Yamini, S., Biswas, R., Jindal, G., Ahmad, A. Y. B., & Dawar, R. (2024). Considering the use of blockchain for supply chain authentication management in a secure and transparent way. In *Recent technological advances in engineering and management* (pp. 259–264). CRC Press.

- Fraihat, B. A. M., Ahmad, A. Y. B., Alaa, A. A., Alhawamdeh, A. M., Soumadi, M. M., Aln'emi, E. A. S., & Alkhawaldeh, B. Y. S. (2023). Evaluating technology improvement in sustainable development goals by analysing financial development and energy consumption in Jordan. *International Journal of Energy Economics and Policy*, 13(4), 348.
- Fraihat, B. A. M., Alhawamdeh, H., Alkhawaldeh, B. Y., Abozraiq, A. M., & Al Shaban, A. (2023). The effect of organizational structure on employee creativity: The moderating role of communication flow: A survey study. *International Journal of Academic Research in Economics and Management Sciences*, 12(2).
- Geetha, B. T., Gnanaprasuna, E., Ahmad, A. Y. B., Rai, S. K., Rana, P., & Kapila, N. (2024, March). Novel metrics introduced to quantify the level of circularity in business models enabled by open innovation. In *2024 International Conference on Trends in Quantum Computing and Emerging Business Technologies* (pp. 1–6). IEEE.
- Geetha, B. T., Kafila, K., Ram, S. T., Narkhede, A. P., Ahmad, A. Y. B., & Tiwari, M. (2024, March). Creating resilient digital asset management frameworks in financial operations using blockchain technology. In *2024 International Conference on Trends in Quantum Computing and Emerging Business Technologies* (pp. 1–7). IEEE.
- Gupta, R., Kim, J., & Lin, M. (2022). Blockchain for government transparency: A review of global applications. *Government Information Quarterly*, 39(2), 101679.
- Hasan, E. F., Alzuod, M. A., Al Jasimee, K. H., Alshdaifat, S. M., Hijazin, A. F., & Khrais, L. T. (2025). The role of organizational culture in digital transformation and modern accounting practices among Jordanian SMEs. *Journal of Risk and Financial Management*, 18(3), 147. <https://doi.org/10.3390/jrfm18030147>
- Iqbal, S., Tian, H., Muneer, S., Tripathi, A., & Ahmad, A. Y. B. (2024). Mineral resource rents, fintech technological innovation, digital transformation, and environmental quality in BRI countries: An insight using panel NL-ARDL. *Resources Policy*, 93, 105074.
- Kai, Z., Sharaf, M., Wei, S. Y., Al Shraah, A., Le, L. T., Bedekar, A. A., & Ahmad, A. Y. B. (2024). Exploring the asymmetric relationship between natural resources, fintech, remittance and environmental pollution for BRICS nations: New insights from MMQR approach. *Resources Policy*, 90, 104693.
- Lehyeh, S. A., Alharafsheh, M., Hanandeh, R., Abuaddous, M., & Al-Hawamdeh, H. (2021). The effects of total quality management practices on strategic performance using the BSC methodology: The mediating role of knowledge sharing. *Academy of Strategic Management Journal*, 20(6), 1–12.
- Liang, P., Guo, Y., Chauhdary, S. T., Agrawal, M. K., Ahmad, S. F., Ahmad, A. Y. A. B., ... & Ji, T. (2024). Sustainable development and multi-aspect analysis of a novel polygeneration system using biogas upgrading and LNG regasification processes, producing power, heating, fresh water and liquid CO₂. *Process Safety and Environmental Protection*, 183, 417–436.
- Liang, P., Guo, Y., Nutakki, T. U. K., Agrawal, M. K., Muhammad, T., Ahmad, S. F., ... & Qin, M. (2024). Comprehensive assessment and sustainability improvement of a natural gas power plant utilizing an environmentally friendly combined cooling heating and power-desalination arrangement. *Journal of Cleaner Production*, 436, 140387.

- Magboul, I., Jebreel, M., Dweiri, M., Qabajeh, M., Al-Shorafa, A., & Ahmad, A. (2024). Antecedents and outcomes of green information technology adoption: Insights from an oil industry. *International Journal of Data and Network Science*, 8(2), 921–934.
- Malkawi, E. M., AL-Malahmeh, Z. A., Al-Nsour, I. A., & Allahham, M. (2025). The impact of digital marketing on tourist engagement: Exploring sustainable development in Jordan. *Lex Localis - Journal of Local Self-Government*, 23(S2), 294–314. <https://doi.org/10.52152/800331>
- Mohammad Alqsass, Munir Al-Hakim, Qais Al Kilani, Lina Warrad, Majed Qabajeh, Ahmad Y. A. Bani Ahmad, & Adnan Qubbaja. (2023). The impact of operating cash flow on earnings per share (Case study based on Jordanian banks). *Kurdish Studies*, 11(2), 2718–2729.
- Mohammad Alqsass, Munir Al-Haki, Mohammad Dweiri, Majed Qabajeh, Dmaithan Almajali, Ahmad Bani Ahmad, & Adnan Qubbaja. (2023). The impact of current ratio on net profit margin (Case study based on Jordanian banks). *Kurdish Studies*, 11(2), 2894–2903.
- Mohammad Jebreel, Mohammad Alnaimat, Amjad Al-Shorafa, Majed Qabajeh, Mohammad Alqsass, & Ahmad Bani Ahmad. (2023). The impact of activity ratios on change in earnings (Case study based on Jordanian food companies). *Kurdish Studies*, 11(2), 4551–4560.
- Moodhi Raid, Al-Nsour, I. A., Al-Johani, M. A., & AlJarba, W. H. (2024). Effect of artificial intelligence on customer relationship marketing in Saudi context. *Journal of International Crisis and Risk Communication Research*, 360–376. <https://doi.org/10.63278/jicrcr.vi.999>
- Moodhi Raid, Al-Nsour, I. A. A. F., & Al-Nsour, I. R. (2024). The causal relationship between returned cheques and economic prosperity in Jordan. *Educational Administration: Theory and Practice*, 30(5). <https://doi.org/10.53555/kuey.v30i5.3739>
- Mohsin, H. J., Hani, L. Y. B., Atta, A. A. B., Al-Alawnh, N. A. K., Ahmad, A. B., & Samara, H. H. (2023). The impact of digital financial technologies on the development of entrepreneurship: Evidence from commercial banks in the emerging markets. *Corporate & Business Strategy Review*, 4(2), 304–312.
- Mustafa, J. A., Atta, A. A. B., Ahmad, A. Y. B., Shehadeh, M., & Agustina, R. (2023). Spillover effect in Islamic and conventional fund family: Evidence from emerging countries. *WSEAS Transactions on Business and Economics*, 20, 1042–1058.
- Naqrash, O. M. A., Alsahli, S. A., Al-Nsour, I. A., & Hasnin, E. A. (2025). The effect of funny e-communications on brand equity: A study on Saudi households in the electrical appliances market. *Lex Localis - Journal of Local Self-Government*, 23(S4), 3749–3769. <https://doi.org/10.52152/801138>
- Naqrash, O. M. A., Riad, M., & Al-Nsour, I. A. (2025). Impact of social media on Saudi buyer behavior in the fashion market. *Lex Localis - Journal of Local Self-Government*, 23(S5), 1876–1901. <https://doi.org/10.52152/801499>
- Narihar, N., Fernandes, P., Tyagi, S., Tyagi, A., Tiwari, M., & Bani Ahmad, A. Y. A. (2025). Using machine learning to enhance cybersecurity threat detection. In *2025 International Conference on Pervasive Computational Technologies (ICPCT)* (pp. 387–391). IEEE. <https://doi.org/10.1109/ICPCT64145.2025.10939232>

- Naved, M., Kole, I. B., Bhope, A., Gautam, C. S., Ahmad, A. Y. B., & Lourens, M. (2024, March). Managing financial operations in the blockchain revolution to enhance precision and safety. In *2024 International Conference on Trends in Quantum Computing and Emerging Business Technologies* (pp. 1–6). IEEE.
- Ni, L., Ahmad, S. F., Alshammari, T. O., Liang, H., Alsanie, G., Irshad, M., ... & Ayassrah, A. Y. B. A. (2023). The role of environmental regulation and green human capital towards sustainable development: The mediating role of green innovation and industry upgradation. *Journal of Cleaner Production*, 138497.
- Ni, L., Fayaz Ahmad, S., Alsanie, G., Lan, N., Irshad, M., Bin Saeed, R. H., ... & Khan, Y. (2024). Investigating the role of green curriculum in shaping pro-environmental behaviors and environmental values orientation for sustainability. *International Journal of Sustainability in Higher Education*, 25(8), 1537–1557.
- Peng, Y., Ahmad, S. F., Ahmad, A. Y. A. B., Al Shaikh, M. S., Daoud, M. K., & Alhamdi, F. M. H. (2023). Riding the waves of artificial intelligence in advancing accounting and its implications for sustainable development goals. *Sustainability*, 15(19), 14165. <https://doi.org/10.3390/su151914165>
- Ramadan, A., Alkhodary, D., Alnawaiseh, M., Jebreen, K., Morshed, A., & Ahmad, A. B. (2024). Managerial competence and inventory management in SME financial performance: A Hungarian perspective. *Journal of Statistics Applications & Probability*, 13(3), 859–870.
- Ramadan, A., Maali, B., Morshed, A., Baker, A. A. R., Dahbour, S., & Ahmad, A. B. (2024). Optimizing working capital management strategies for enhanced profitability in the UK furniture industry: Evidence and implications. *Journal of Infrastructure, Policy and Development*, 8(9), 6302.
- Raza, A., Al Nasar, M. R., Hanandeh, E. S., Zitar, R. A., Nasereddin, A. Y., & Abualigah, L. (2023). A novel methodology for human kinematics motion detection based on smartphones sensor data using...
- Rumman, G., Alkhazali, A., Barnat, S., Alzoubi, S., AlZagheer, H., Dalbough, M., ... & Darawsheh, S. (2024). The contemporary management accounting practices adoption in the public industry: Evidence from Jordan. *International Journal of Data and Network Science*, 8(2), 1237–1246.
- S. A. Y. A. Bani Ahmad, Y. M. A. Tarshany, F. T. M. Ayasrah, F. S. Mohamad, S. I. A. Saany, & B. Pandey. (2023). The role of cybersecurity in e-commerce to achieve the Maqasid of money. In *2023 International Conference on Computer Science and Emerging Technologies (CSET)* (pp. 1–8). IEEE. <https://doi.org/10.1109/CSET58993.2023.10346972>
- Selvasundaram, K., Jayaraman, S., Chinthamani, S. A. M., Nethravathi, K., Ahmad, A. Y. B., & Ravichand, M. (2024). Evaluating the use of blockchain in property management for security and transparency. In *Recent technological advances in engineering and management* (pp. 193–197). CRC Press.
- Sharabati, A. A. A., Allahham, M., AbuSaimeh, H., Ahmad, A. Y. B., Sabra, S., & Daoud, M. K. (2023). Effects of artificial integration and big data analysis on economic viability of solar microgrids: Mediating role of cost benefit analysis. *Operational Research in Engineering Sciences: Theory and Applications*, 6(3).

- Singh, R., Gupta, N. R., & Ahmad, A. Y. (2024). An empirical study on challenges of working from home during COVID-19 on work-life domains in the education sector in Bengaluru. In S. Singh, S. Rajest, S. Hadoussa, A. Obaid, & R. Regin (Eds.), *Data-driven intelligent business sustainability* (pp. 111–121). IGI Global. <https://doi.org/10.4018/979-8-3693-0049-7.ch008>
- Verma, C., P, V., Chaturvedi, N., U, U., Rai, A., & Bani Ahmad, A. Y. A. (2025). Artificial intelligence in marketing management: Enhancing customer engagement and personalization. In *2025 International Conference on Pervasive Computational Technologies (ICPCT)* (pp. 397–401). IEEE. <https://doi.org/10.1109/ICPCT64145.2025.10940626>
- Wang, C., Ahmad, S. F., Ayassrah, A. Y. B. A., Awwad, E. M., Irshad, M., Ali, Y. A., ... & Han, H. (2023). An empirical evaluation of technology acceptance model for artificial intelligence in e-commerce. *Heliyon*, 9(8).
- Wang, M., Ahmad, S. F., Agrawal, M. K., Ahmad, A. Y. A. B., Awan, A. B., Usmani, Y. S., ... & Han, W. (2025). Thermodynamic, economic, and environmental footprint assessments and optimization of an innovative biogas-driven heat integration network, producing power, cooling, and heating. *Energy*, 322, 135379.
- William, P., Ahmad, A. Y. B., Deepak, A., Gupta, R., Bajaj, K. K., & Deshmukh, R. (2024). Sustainable implementation of artificial intelligence based decision support system for irrigation projects in the development of rural settlements. *International Journal of Intelligent Systems and Applications in Engineering*, 12(3s), 48–56.
- Wu, J., Ahmad, S. F., Ali, Y. A., Al-Razgan, M., Awwad, E. M., & Ayassrah, A. Y. B. A. (2024). Investigating the role of green behavior and perceived benefits in shaping green car buying behavior with environmental awareness as a moderator. *Heliyon*, 10(9).
- Yahiya, A., & Ahmad, B. (2024). Automated debt recovery systems: Harnessing AI for enhanced performance. *Journal of Infrastructure, Policy and Development*, 8(7), 4893.
- Yahiya Ahmad Bani Ahmad (Ayassrah), Ahmad, Ahmad Mahmoud Bani Atta, Anas, Ali Alawawdeh, Hanan, Abdallah Aljundi, Nawaf, Morshed, Amer, & Amin Dahbour, Saleh. (2023). The effect of system quality and user quality of information technology on internal audit effectiveness in Jordan, and the moderating effect of management support. *Applied Mathematics & Information Sciences*, 17(5). <https://dx.doi.org/10.18576/amis/170512>
- Zhan, Y., Ahmad, S. F., Irshad, M., Al-Razgan, M., Awwad, E. M., Ali, Y. A., & Ayassrah, A. Y. B. A. (2024). Investigating the role of cybersecurity's perceived threats in the adoption of health information systems. *Heliyon*, 10(1).
- Zhang, L., Ahmad, S. F., Cui, Z., Al Razgan, M., Awwad, E. M., Ayassrah, A. Y. B. A., & Shi, K. (2024). Energy, exergy, thermoeconomic analysis of a novel multi-generation system based on geothermal, Kalina, double effect absorption chiller, and LNG regasification. *Desalination*, 117830.
- Zhao, T., Ahmad, S. F., Agrawal, M. K., Ahmad, A. Y. A. B., Ghfar, A. A., Valsalan, P., ... & Gao, X. (2024). Design and thermo-enviro-economic analyses of a novel thermal design process for a CCHP-desalination application using LNG regasification integrated with a gas turbine power plant. *Energy*, 295, 131003.

- Jamil, K., Dunnan, L., Gul, R. F., Shehzad, M. U., Gillani, S. H. M., & Awan, F. H. (2022). Role of social media marketing activities in influencing customer intentions: A perspective of a new emerging era. *Frontiers in Psychology*, 12, Article 808525. <https://doi.org/10.3389/fpsyg.2021.808525>
- Lim, W. M., & Weissmann, M. A. (2023). Financial planning behaviour: A systematic literature review and new theory development. *Journal of Financial Services Marketing*, 28(4), 698–718. <https://doi.org/10.1057/s41264-023-00249-1>
- Liu, M., Zhang, H., & Chen, J. (2025). Social media use and job choices: The mediating roles of work values and self-efficacy. *Frontiers in Psychology*, 16, Article 1485663. <https://doi.org/10.3389/fpsyg.2025.1485663>
- Nkwantabisa, T. A., & Owusu-Acheampong, E. (2024). Thematic review of financial education and financial literacy in the digital age. *Acta Oeconomica*, 74(4), 483–507. <https://doi.org/10.1556/032.2024.00023>
- Pandey, D., & Guillemette, M. (2024). Social media for investment advice and financial satisfaction: Does generation matter? *Journal of Risk and Financial Management*, 17(9), Article 410. <https://doi.org/10.3390/jrfm17090410>
- Patel, P., & Nayak, K. (2024). A study of financial behavior based on theory of planned behavior. *ShodhKosh: Journal of Visual and Performing Arts*, 5(6), 1–12. <https://doi.org/10.29121/shodhkosh.v5.i6.2024.2924>
- Pawar, J. M., & Chavan, S. (2024). The power of social media in the decision-making of current and future professionals: A crucial analysis in the digital era. *Cogent Business & Management*, 11(1), Article 2421411. <https://doi.org/10.1080/23311975.2024.2421411>
- Pawar, S. K. (2024). Social media in higher education marketing: A systematic literature review and research agenda. *Cogent Business & Management*, 11(1), Article 2423059. <https://doi.org/10.1080/23311975.2024.2423059>
- Rodriguez, J. M., Velez, C. F., & Palallos, L. Q. (2024). Social media influence on senior high students' spending behavior for a financial management plan. *International Journal of Management, Knowledge and Learning*, 13, 273–286. <https://doi.org/10.53615/2232-5697.13.273-286>
- She, L., Rasiah, R., Weissmann, M. A., & Kaur, H. (2024). Using the theory of planned behaviour to explore predictors of financial behaviour among working adults in Malaysia. *FIIB Business Review*, 13(2), 210–225. <https://doi.org/10.1177/23197145231169336>
- Shvaher, O., Degtyarev, S., & Polyakova, L. (2021). The effect of social media on financial literacy. *International Journal of Media and Information Literacy*, 6(1), 211–218. <https://doi.org/10.13187/ijmil.2021.1.211>
- Singh, S., & Chakraborty, A. (2024). Role of social media in investment decision-making: A comprehensive review and future roadmap. *Vision: The Journal of Business Perspective*, 28(3), 381–394. <https://doi.org/10.1177/09718907241243187>

- Sivakumar, A., Jayasingh, S., & Shaik, S. (2023). Social media influence students' knowledge sharing and learning: An empirical study. *Education Sciences*, 13(7), Article 745. <https://doi.org/10.3390/educsci13070745>
- Taha, H., Abu-Surrah, D., Abu-Awad, L., Mahmoud, A., Al-Qadi, T., Al Hamdan, L., Hijazi, M., Al Ani, A., & Berggren, V. (2025). Assessment of the effect of social media use on medical students' academic performance: Cross-sectional study from Jordan. *Frontiers in Public Health*, 13, Article 1551905. <https://doi.org/10.3389/fpubh.2025.1551905>
- Tandon, U., Ertz, M., & Bansal, H. (2021). Social media disposition and attitude toward financial products among millennials. *Journal of Consumer Behaviour*, 20(5), 1313–1327. <https://doi.org/10.1002/cb.1935>
- Wyss, M. C., Robinson, J. P., Elliot, M., & Qargha, O. (2022, November). *Improving financial literacy skills for young people: Scaling the financial education program in Jordan*. Brookings Institution. <https://www.brookings.edu/articles/improving-financial-literacy-skills-for-young-people-scaling-the-financial-education-program-in-jordan/>