

The Impact of the Knowledge Economy on Corporate Social Responsibility (CSR) - Kingdom of Saudi Arabia

تأثير اقتصاد المعرفة على المسؤولية الاجتماعية للشركات
-المملكة العربية السعودية-

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Abstract:

This study aims to identifying the impact of the knowledge economy on corporate social responsibility (CSR). The study population consists of all employees in organizations and institutions across various industries and geographical locations in the Kingdom of Saudi Arabia, from which a random sample of (150) members was taken. Only 144 questionnaires were retrieved, with a recovery rate of 96% of the sample, the validity and reliability of the questionnaire were calculated, and it was found that Cronbach's alpha stability coefficient is equal to 0.91. The study adopts a quantitative research design, using structured pre-coded pre-tested questionnaire. Among the most important findings of the study are: there

are statistically significant differences at the level of 0.05 or less in relation to the questionnaire axes (knowledge economy, Knowledge management practices and social responsibility). The study also suggests a number of recommendations, the most important of which are: Developing indicators to measure the impact of the knowledge economy on social responsibility and exploring the role of digital transformation and artificial intelligence in strengthening the relationship between the knowledge economy and organizational social responsibility.

Key words: Knowledge Economy, Corporate Social Responsibility, Kingdom of Saudi Arabia

تأثير اقتصاد المعرفة على المسؤولية الاجتماعية للشركات - المملكة العربية السعودية

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الملخص

دلالة إحصائية عند مستوى 0.05 أو أقل فيما يتعلق بمحاور الاستبيان (اقتصاد المعرفة، وممارسات إدارة المعرفة، والمسؤولية الاجتماعية). كما تقترح الدراسة عدداً من التوصيات، أهمها: تطوير مؤشرات لقياس أثر اقتصاد المعرفة على المسؤولية الاجتماعية، واستكشاف دور التحول الرقمي والذكاء الاصطناعي في تعزيز العلاقة بين اقتصاد المعرفة والمسؤولية الاجتماعية للمنظمات.

الكلمات المفتاحية: اقتصاد المعرفة، المسؤولية الاجتماعية للشركات، المملكة العربية السعودية

تهدف هذه الدراسة إلى تحديد تأثير اقتصاد المعرفة على المسؤولية الاجتماعية للشركات. يتكون مجتمع الدراسة من جميع الموظفين في المنظمات والمؤسسات عبر مختلف القطاعات والمواقع الجغرافية في المملكة العربية السعودية، حيث تم اختيار عينة عشوائية مكونة من 150 موظفاً. تم استرداد 144 استبياناً فقط، بنسبة استجابة بلغت 96% من العينة. تم حساب صدق وثبات الاستبيان، ووجد أن معامل ألفا كرونباخ للثبات يساوي 0.91. اعتمدت الدراسة تصميماً بحثياً كمياً، باستخدام استبيان منظم ومُرمز مسبقاً ومُختبر. من أهم نتائج الدراسة: وجود فروق ذات

Introduction

In recent decades, the global economy has undergone significant transformations due to rapid advancements in information and communication technologies and the growing role of knowledge as a strategic resource for economic and social development. These changes have given rise to the knowledge economy, which relies on the creation, application, and dissemination of knowledge across economic and organizational activities. Consequently, knowledge has become a primary source of value creation and a key driver of competitive advantage for organizations in the modern era (World Bank, 2020). Accordingly, the global economy has experienced significant transformations due to rapid technological advancements, digitalization, and the growing role of knowledge as a strategic resource. This has given rise to the knowledge economy, which emphasizes the creation, dissemination, and utilization of knowledge to drive economic growth and organizational competitiveness. Within this context, organizations increasingly rely on intellectual capital, innovation, and advanced technological systems to maintain their competitive advantage and support sustainable development (Carayannis & Ferreira & Fernandes, 2021).

The concept of the knowledge economy has become a central focus in contemporary economic and organizational discussions. It refers to an economic system that relies on the production, dissemination, and effective application of knowledge to create value and promote sustainable economic growth. This economy rests on several key components, most notably human capital, information and communication technologies, innovation systems, and institutional frameworks that support knowledge production and exchange (World Bank, 2020).

Organizations embedded in entrepreneurial ecosystems benefit from effective innovation networks, enhancing economic growth, entrepreneurship, and global competitiveness. Integrating knowledge management practices is crucial for fostering collaboration and innovation, particularly in complex, digitally transformed, and socially responsible environments. Key elements such as innovation networks, entrepreneurship, knowledge management, and technology drive organizational growth and competitiveness. Future research should quantitatively validate these findings and explore business models of successful entrepreneurial organizations to provide deeper insights for economic development and value creation (Khodadadi & Feizi (2015).

The concept of Corporate Social Responsibility (CSR) has evolved significantly in recent years, becoming a strategic tool to enhance corporate reputation and ensure institutional sustainability. CSR practices are shown to improve organizational performance, strengthen trust with stakeholders, and support sustainable economic growth (Din et al., 2025).

Despite the growing academic interest in studying the knowledge economy and social responsibility in recent years, the relationship between them still requires further research, particularly regarding the role of the various components of the

knowledge economy—such as human, organizational, and technological knowledge—in promoting social responsibility practices within organizations. This study aims to explore the impact of the knowledge economy and its components on the level of corporate social responsibility, thereby contributing to the enrichment of the scholarly literature on sustainable development and knowledge management in modern organizations.

Problem statement

Despite the growing research interest in both the knowledge economy and corporate social responsibility (CSR), most studies have addressed each one of them independently. Some studies have focused on the role of the knowledge economy in fostering innovation and economic development, while others have examined the role of CSR in improving organizational performance and supporting the sustainability of organizations. Therefore, the relationship between the knowledge economy and CSR practices within organizations still requires further investigation, particularly in the Arab context, which is witnessing rapid shifts towards a knowledge-based economy.

Therefore, there is a need for applied studies that analyze the relationship between the knowledge economy and corporate social responsibility (CSR), with the aim of understanding the role of knowledge economy components in supporting CSR practices within organizations. In this context, the current study aims to examine the impact of the knowledge economy on enhancing CSR, contributing to an analytical framework that clarifies the nature of the relationship between knowledge economy variables and the dimensions of CSR, and assisting decision-makers in developing knowledge-based and sustainable corporate strategies.

Study Questions

The present study is guided by the following questions:

- 1- What is the concept of the knowledge economy, and what are its most important dimensions and components in contemporary organizational contexts?
- 2- To what extent does human knowledge within organizations influence the level of implementation of social responsibility?
- 3- What is the nature of the impact of organizational knowledge on the level of social responsibility in organizations?
- 4- How does technological knowledge affect the level of commitment of organizations to implementing social responsibility?
- 5- What is the nature of the relationship between the application of knowledge economy practices and the level of social commitment of organizations?
- 6- What mechanisms or strategies can contribute to enhancing the integration between the knowledge economy and the social responsibility of organizations?

These questions lead to an exploration of the different dimensions of the knowledge economy and its impact on the CSR, and thus, help to provide a more comprehensive understanding of its ability to raise productive efficiency, which leads to sustainable development.

Objectives:

Main Objective:

To identifying the impact of the knowledge economy on corporate social responsibility (CSR).

Specific Objectives:

1. To explore the concept and dimensions of the knowledge economy.
2. To examine the impact of the main components of the knowledge economy - human, organizational, and technological knowledge- on (CSR).
3. To investigate the relationship between the implementation of knowledge management practices and the level of corporate social commitment.
4. To propose strategic recommendations aimed at strengthening the integration between the knowledge economy and (CSR) within business organizations.

Significance of the Study:

The world has witnessed a rapid shift towards a knowledge economy, which relies on knowledge, innovation, and technology as key drivers of development and enhanced organizational competitiveness. In this context, social responsibility has emerged as a strategic dimension reflecting organizations' commitment to society, highlighting the importance of studying the impact of the knowledge economy on strengthening social responsibility practices within organizations.

Scientific importance

The scientific significance of this study stems from its contribution to enriching the academic literature related to both the knowledge economy and corporate social responsibility (CSR), topics that have garnered increasing attention in contemporary economic and administrative studies. The study also aims to clarify the concept of the knowledge economy and its main dimensions within an organizational context, and to analyze the impact of its fundamental components—human knowledge, organizational knowledge, and technological knowledge—on the level of CSR implementation within organizations.

Furthermore, the study contributes to clarifying the relationship between knowledge management practices and the level of social commitment of organizations by highlighting the role of knowledge management in promoting CSR practices. In addition, the study provides an analytical framework that illustrates the complementary relationship between the knowledge economy and CSR, thus helping to build a conceptual model that links the dimensions of the knowledge economy

with the level of social commitment of organizations. This provides a scientific foundation that can be utilized in future studies related to the knowledge economy and organizational sustainability.

Practical importance:

The practical significance of this study lies in providing findings that can help decision-makers in organizations to understand the strategic role of the knowledge economy in supporting corporate social responsibility (CSR) practices. It also highlights the importance of developing organizational structures and knowledge management systems that promote knowledge sharing and application across various organizational activities, thereby strengthening institutions' ability to embrace CSR and achieve corporate sustainability.

Furthermore, the study sheds light on the growing role of technology and digital transformation in supporting the knowledge economy within organizations by enhancing corporate transparency, improving communication with stakeholders, and supporting social and environmental initiatives. In addition, the study's findings can benefit policymakers and regulators in developing policies and programs that encourage the adoption of the knowledge economy and promote CSR practices, contributing to the achievement of the Sustainable Development Goals and supporting the private sector's role in economic and social development.

Delimitations of the Study:

Objectivity limit: Knowledge economy and corporate social responsibility

Human limit: Employees in organizations and institutions in the Kingdom of Saudi Arabia.

Time limits: Year (2025 - 2026).

Spatial Limits: Kingdom of Saudi Arabia.

Conceptual framework and previous studies:

The following paragraphs present the theories, concepts and notions related to the present study and a number of previous studies.

The Conceptual framework:

The concept of the knowledge economy:

The knowledge economy is a modern concept in contemporary economics, relying on the production, application, and dissemination of knowledge as a primary source of economic growth and enhanced competitiveness. This concept emerged as a result of the technological and digital transformations witnessed by the global economy in recent decades.

The knowledge economy refers to an economic system that relies heavily on knowledge, innovation and advanced technology, along with qualified human capital, to support productive and service activities (Ramadan, 2023).

Knowledge also represents a key added value in the modern economy, where organizations have come to rely on innovation, information, and technology as key drivers of competitiveness and sustainability (Ramadan, 2023).

The knowledge economy is a modern economic model that relies on the production, development, and application of knowledge as a key strategic resource for boosting economic growth and enhancing organizational competitiveness. In this context, knowledge, innovation, and technology are fundamental drivers of value creation and productivity improvement, compared to traditional economies based on physical resources. The knowledge economy is based on key components such as human capital, information and communication technologies, innovation systems, and institutional frameworks that support knowledge sharing. Organizations strive to enhance their knowledge management, innovation, and organizational learning capabilities to keep pace with rapid changes and achieve sustainable performance in the contemporary global economy (World Bank, 2020; Carayannis, Ferreira & Fernandes, 2021).

The knowledge economy refers to an economic system that relies on the production, development, dissemination, and effective application of knowledge to support economic development. The importance of knowledge, particularly in developing countries, is evident in its ability to enhance the capabilities of the local economy and increase its international competitiveness through its application in various fields such as entrepreneurship, innovation, and research and development (Dima et al., 2018).

Characteristics of the knowledge economy:

The knowledge economy is characterized by its reliance on intellectual capital as the primary resource for achieving innovation and competitive advantage, alongside the pivotal role of digital technology in knowledge production and exchange. This economy also focuses on continuous innovation and the development of products and organizational processes, and supports an environment based on lifelong learning and knowledge sharing among individuals within the organization. The knowledge economy rests on a set of fundamental elements, including knowledge-based human capital, innovation and technology, knowledge management, and digital infrastructure, which collectively contribute to improving organizational performance and enhancing organizational sustainability (Nagy & Somosi, 2022; Chen et al., 2022).

Recent studies indicate that organizations that invest in knowledge and technology are better able to develop social responsibility strategies and achieve sustainable development (Alaeddine, 2023).

The concept of corporate social responsibility:

Corporate social responsibility refers to an organization's commitment to contributing to economic, social and environmental development through ethical and sustainable practices (Carroll & Brown, 2022).

Corporate social responsibility refers to an organization's commitment to integrating social and environmental aspects into its activities, decisions, and stakeholder relationships, thereby achieving a positive impact on society while maintaining its economic performance (Awa et al., 2024).

The concept of corporate social responsibility (CSR) is used to describe the non-commercial relationships that organizations have with various societal stakeholders and society as a whole. While often associated with for-profit companies, it also extends to non-profit organizations such as government agencies, NGOs, and social enterprises. (Yunas et al., 2024)

The role of the knowledge economy in supporting the economic dimension of social responsibility:

The knowledge economy contributes to strengthening the economic dimension of social responsibility by supporting innovation and improving productivity through the use of technology and data analysis, leading to reduced costs, increased competitiveness, and the achievement of sustainable economic value. Adopting digital knowledge-based business models also promotes long-term economic growth and enhances transparency and corporate governance through knowledge management systems and digital technologies (Lee & Trimi, 2021; Ranta et al., 2022; Khan et al., 2023).

The role of the knowledge economy in supporting the social dimension of corporate social responsibility:

The knowledge economy contributes to enhancing organizational social responsibility by developing human capital through training and continuous learning, supporting social innovation by using knowledge and technology to address societal issues, and promoting digital inclusion and bridging the gap in access to knowledge and services. Studies also show that knowledge-based organizations tend to adopt more socially responsible practices toward employees and society (Bolisani & Bratianu, 2022; George et al., 2021; UNDP, 2022;). In addition, Corporate social and environmental responsibility is associated with knowledge exploration, while economic responsibility is more related to knowledge exploitation. The findings indicate that CSR indirectly enhances innovation capabilities through exploitation strategies, whereas its impact through exploration strategies is not statistically significant. (Isabel, Mario J. & Fatima G. 2023).

The Kingdom of Saudi Arabia is an Arab and Islamic country, home to many civilizations and cultures, the cradle of Islam and the Qibla of Muslims. Its capital is Riyadh, and its official language is Arabic (Technology, 2023).

Therefore, the knowledge economy is no longer limited to a mere method of monitoring and analysis, but has transformed into a strategic tool that promotes entrepreneurial thinking, contributes to improving the quality of decision-making, and enhances the overall performance of institutions, especially in business environments that rely on change and innovation.

Previous Studies

The study by Goldani and Tirvan (2024) titled “Economic diversification and social progress in the GCC countries: A Study on the Transition from Oil-Dependency to Knowledge-Based Economies” examined the relationship between the transition to a knowledge economy and the level of social progress in the Gulf Cooperation Council (GCC) countries, relying on World Bank data and economic forecasting models. The results showed that investment in human capital, education, and technology directly contributes to enhancing social development and achieving societal well-being. The study also recommended supporting innovation and developing human capabilities to strengthen the knowledge economy.

Omar and Ghraissi (2024) conducted a study titled “Knowledge Management and Its Impact on Corporate Social Responsibility,” which aimed to analyze the impact of knowledge management on enhancing corporate social responsibility. This was achieved through a questionnaire administered to a sample of 38 economic institutions in the provinces of Oran and Mascara. The results showed that knowledge management contributes to supporting various dimensions of social responsibility, including the environmental, economic, social, and philanthropic dimensions. The economic dimension emerged as the most affected, given its close relationship with knowledge management. The study also recommended integrating social responsibility practices into corporate strategy and allocating them a similar level of attention and resources compared to other core activities.

In the study of Alshukri et al. (2024) titled “The Interplay of Corporate Social Responsibility, Innovation Capability, Organizational Learning, and Sustainable Value Creation: Does Stakeholder Engagement Matter?”, they examined the role of corporate social responsibility (CSR) in promoting sustainable value creation by analyzing its impact on organizational learning and innovation capacity, while also considering stakeholder engagement as a moderating variable. The study employed a quantitative approach, surveying a sample of 416 managers in the Turkish manufacturing sector and utilizing structural equation modeling. The results demonstrated that CSR positively influences both organizational learning and innovation, thereby contributing to the enhancement of sustainable value. Furthermore, this relationship was shown to be strengthened with increasing stakeholder engagement.

The study by Khodadadi & Feizi (2015) aimed to investigate the impact of knowledge management on social responsibility. The research population consisted of 800 clients of the Social Security Institution in East Azerbaijan Province. Using the Cochran formula, a simple random sample of 260 participants was selected.

Data were collected through a 23-item questionnaire and analyzed using descriptive and inferential statistical methods. Structural equation modeling (SEM) was applied to test the study hypotheses. The results indicated that the model showed acceptable fit indicators, confirming the suitability of the proposed research model.

Corporate social responsibility (CSR) is a self-regulatory model that enhances corporate accountability to stakeholders and serves as a strategic tool to bolster competitiveness in the market. A study by Younas et al. (2024) titled "Review of corporate social responsibility dimensions" explored the dimensions of CSR through a broad framework encompassing governance, community well-being, health and education, workforce, products and services, as well as the environment and energy, highlighting the role of these dimensions in achieving shared value and enhancing organizational competitiveness.

Previous studies highlight the growing interest in the relationship between the knowledge economy and CSR. The findings generally indicate that adopting knowledge-based capabilities, such as human capital development, technology use, and knowledge management, is associated with improved social and environmental outcomes. Furthermore, organizations that prioritize knowledge and innovation tend to demonstrate a stronger commitment to transparency and sustainability, although they may face limitations related to a lack of knowledge infrastructure and limited organizational awareness. Despite these contributions, a significant gap remains, particularly due to the scarcity of studies in the Arab context, underscoring the need for further research.

Hypothesis

1. The first main hypothesis: There are statistically significant differences in the impact of the knowledge economy on corporate social responsibility.

The following are the sub-hypotheses emerge from it:

- There are statistically significant differences in the impact of human knowledge on corporate social responsibility.
- There are statistically significant differences in the impact of organizational knowledge on corporate social responsibility.
- There are statistically significant differences in the impact of technological knowledge on corporate social responsibility

2. The second main hypothesis is: There are statistically significant differences in the impact of the knowledge economy on knowledge management practices.

The following are the sub-hypotheses emerge from it:

- There are statistically significant differences in the impact of human knowledge on the knowledge management practices.
- There are statistically significant differences in the impact of organizational knowledge on knowledge management practices.

- There are statistically significant differences in the impact of technological knowledge on knowledge management practices.

3. There are statistically significant differences in the impact of knowledge management practices on corporate social responsibility.

Methodology

This section tackles the methods adopted in this study; study design, sampling, and methods of data collection.

Study Design

The study design for examining the impact of the knowledge economy on corporate social responsibility adopts an analytical cross-sectional design to collecting and analyzing data. This design ensures that the research objectives are met while maintaining scientific rigor.

The key components of the study design include the research approach, sampling method, data collection techniques, data analysis strategy and interpret the results obtained and determine the possibility of generalizing them.

To study the research topic and address it from its various dimensions, the descriptive analytical approach was relied upon, which aims to collect information related to the problem under study by collecting primary data using a questionnaire specifically designed to achieve the study objectives, then analyzing that data, interpreting the results reached, and determining the possibility of generalizing them.

Sampling Method:

Study Population:

The target population for this study consists of all employees in organizations and institutions in the Kingdom of Saudi Arabia.

Sampling Technique

Given the population structure, simple random sample design is applied for selecting the necessary samples.

A simple random sample was used, where the sample size was calculated using the equation (Thompson, 2012). Applying the equation resulted in a number of (150) individuals as a sample for the study, as the sample was representative of the study population. To collect primary data for the research, (144) questionnaires were retrieved, with a recovery rate of approximately (96%).

Data collection methods

The research relied mainly on primary data collected through the use of a structured questionnaire designed specifically to achieve the aims of the study and was previously tested in order to ensure the validity and reliability of the questionnaire.

Data Analysis

The data was processed using the statistical program SPSS version 28, and the validity and reliability of the questionnaire were verified using the Cronbach's alpha reliability coefficient and the correlation coefficient. Descriptive statistics and inferential statistics were used to analyze the data, represented by the following statistical choices:

Arithmetic mean, standard deviation, percentages, weighted average, one-sample t-test, the correlation coefficient, ANOVA test (One Way analysis of variance) and linear regression analysis.

A five-point Likert scale was used to measure the respondents' responses to the questionnaire statements by choosing one answer from among a number of options.

Arithmetic means were used to describe the trends of the study items towards the study variables as shown in Table (1):

Table (1): Rating scale according to the five-point Likert scale

Response	Weighted mean	Impact level
1-1.80	Strongly disagree	Low
1.81-2.60	Disagree	
2.61-3.40	Natural	Medium
3.41-4.20	Agree	High
4.21-5	Strongly agree	

Reliability

An exploratory sample of 30 individuals from outside the study sample was selected and statistical analysis was conducted to ensure reliability by using the test and retest method to verify the reliability of the questionnaire, then using the Pearson correlation coefficient in the first test and also when retesting for the second time, where the value of the reliability coefficient was 0.89. The internal consistency coefficient of the tool was also found using the alpha Cronbach's equation, for each axis of the questionnaire as well as for the whole questionnaire. It was found that all values of the Cronbach's alpha coefficient for each axis of the questionnaire were 0.90 and more, which indicates and confirms the reliability of the scale, as well as when the scale was conducted on all questionnaire questions had a Cronbach's alpha value of 0.91, and this also confirms the reliability of the scale for the whole questionnaire, as shown in table (2) .

Table (2): Shows Cronbach's alpha values

Axis	Number of questions	Cronbach's alpha reliability coefficient
human knowledge	5	0.90
Organizational knowledge	5	0.91
Technological knowledge	5	0.92
Knowledge management practices	5	0.91
social responsibility	9	0.92
All	29	0.91

Source: The Authors, according to the outputs of SPSS V.28

Validity

The questionnaire was presented to arbitrators to verify its effectiveness, its achievement of the objectives of the study, and its ability to measure the dimensions targeted by the study. The internal consistency of the questionnaire phrases was also calculated on the exploratory sample of the study by calculating the Pearson correlation coefficient between each of the phrases of the questionnaire axes and the overall average of the phrases in the axis, where it was found that all correlation coefficients have statistical significance as they are all less than 0.05, and this indicates the strength of internal consistency and thus all axes of the questionnaire are considered true to what they were designed to measure.

Study results

This section represents the results of study.

Demographic variable

Table (3): Shows the distribution of study sample members according to demographic variables

Gender	frequency	%
Male	65	45.1%
Female	79	54.9%
Total	144	100
Experience		
< 1	3	2.1%
1 – 3	15	10.4%
4 – 6	15	10.4%
> 6	111	77.1%
Total	144	100

Source: The Authors, according to the outputs of SPSS V.28

Table (3) shows the distribution of the study sample members by gender, and experience years. The study showed that the percentage of males was (45.1%), while the percentage of females was (54.9%) which is the highest percentage. Also, the result shows that the experience less than one year was (2.1%) which is the lowest percent, and the experience years more than six was (77.1%) which is the highest percent.

Table (4): Shows the distribution of study sample members according to the characteristics of the organization.

Administrative level	frequency	%
Academic	42	29.2%
Senior management	18	12.5%
Executive Management	43	29.9%
Middle Management	41	28.5%
Total	144	100%
Sector type		
Academic	42	29.2%
Commercial	61	42.4%
Service	41	28.5
Total	144	100
Organization size		
Small	6	4.2
Medium	87	60.6
Large	51	35.4
Total	144	100

Source: The Authors, according to the outputs of SPSS V.28

The sample results in Table (4) show diversity in management levels, with executive management accounting for 29.9%, followed by academia (29.2%), then middle management (28.5%), while senior management had the lowest percentage (12.5%). The commercial sector led with 42.4%, compared to the academic sector (29.2%) and the service sector (28.5%). Regarding organizational size, medium-sized organizations comprised the largest share (60.6%), followed by large organizations (35.4%) and small organizations (4.2%), reflecting a suitable diversity that supports the accuracy of the results.

Table (5): Results analysis of the questionnaire axes

Questionnaire topics	N	Mean	SD	Sig.	Impact level	Ranking
human knowledge	5	4.000	0.659	0.000	high	4
Organizational knowledge	5	3.842	0.708	0.000	high	5
Technological knowledge	5	4.163	0.587	0.000	high	1
Knowledge management practices	5	4.025	0.683	0.000	high	2
social responsibility	9	4.014	0.640	0.000	high	3
All	29	4.009	0.655	0.000	high	

Source: The Authors, according to the outputs of SPSS V.28

Table (5) shows that there are statistically significant differences from the mean value of scale (3) at a significance level of (0.05) for all axes of the questionnaire, which indicates that there are a difference between the answers of the sample members and the average for all statements in each axis of the questionnaire, where the axes' averages were limited to (3.842-4.163) (Agree), which shows that the impact level is high in all aspects of the questionnaire.

The arithmetic means and standard deviation of the mean of the answers to the statements of each axis of the study were also calculated to determine if there is statistical significance for the mean of the scale (value 3) using the one-sample t-test, as shown in Tables (6, 7, 8).

Table (6): Factors that measure human knowledge

Questionnaire topics	N	Mean	SD	Sig.	Impact level	Ranking
The organization is committed to continuously developing the skills of its employees.	144	4.19	0.757	0.000	high	1
The organization possesses qualified human resources capable of generating knowledge.	144	4.13	0.698	0.000	high	2
The organization encourages innovation and creativity among employees.	144	3.91	0.974	0.000	high	4

Questionnaire topics	N	Mean	SD	Sig.	Impact level	Ranking
Experiences and knowledge are exchanged effectively among employees.	144	3.85	0.877	0.000	high	5
The organization invests in ongoing training and learning for employees.	144	3.98	0.762	0.000	high	3
All	144	4.01	0.816	0.000	high	

Source: The Authors, according to the outputs of SPSS V.28

After calculating the mean and standard deviation of the answers to the variables of the human knowledge, it became clear that the phrase “The organization is committed to continuously developing the skills of its employees”. obtained the highest average (4.19), while the phrase “Experiences and knowledge are exchanged effectively among employees.” obtained the lowest average and its value is (3.85).

As noted in Table (6), the average response of all sample members to all statements regarding the axis of the human knowledge was equal to (4.01). This value is higher than the average value of the scale, indicating that there is agreement from all sample members regarding the axis’ statements in general, and this agreement high “all the answers of questions more than (3.41)” which indicate that the impact level according to the five-point Likert scale was high. The t-test analysis of the single sample also indicated the presence of a statistically significant difference, as it is less than (0.05). This indicates that the average response score to the axis of the role of human knowledge differs fundamentally from the average approval score (3), indicating that the human knowledge has clear contributions to supporting knowledge economy, varying in importance. As all questions on the role of human knowledge have averages more than (3.41), which indicates that the level of influence is high. This may be due to the great attention that companies are giving to the role of human knowledge, given its active role in the knowledge economy, which may contribute to serving society and achieving development and progress in the field of corporate social responsibility.

Table (7): Factors that measure Organizational knowledge

Questionnaire topics	N	Mean	SD	Sig.	Impact level	Ranking
The organization has clear knowledge management policies.	144	3.97	0.938	0.000	high	2
Institutional expertise and knowledge are documented within the organization.	144	3.98	0.950	0.000	high	1
Administrative decisions depend on knowledge and information within the organization.	144	3.88	0.907	0.000	high	4
The organization's structure supports knowledge sharing.	144	3.63	0.602	0.000	high	5
The organization's culture encourages institutional learning.	144	3.94	0.804	0.000	high	3
All	144	3.88	0.840	0.000	high	

Source: The Authors, according to the outputs of SPSS V.28

After calculating the mean and standard deviation of the answers to the variables of the Organizational knowledge, it became clear that the phrase “Institutional expertise and knowledge are documented within the organization” obtained the highest average (3.98), while the phrase “The organization's structure supports knowledge sharing” obtained the lowest average and its value is (3.63).

As noted in Table (7), the average response of all sample members to all statements regarding the axis of the organizational knowledge is equal to (3.88), this value is higher than the average value of the scale, indicating that there is agreement from all sample members regarding the axis' statements in general, and this agreement is high. “All the answers of questions more than (3.41)” which indicate that the impact level according to the five-point Likert scale was high. The t-test analysis of the single sample also indicated the presence of a statistically significant difference, as it is less than (0.05). This indicates that the average response score to the axis of the organizational knowledge differs fundamentally from the average approval score (3), indicating that the organizational knowledge has clear contributions to supporting knowledge economy, varying in importance. As all questions on the organizational knowledge had averages more than (3.41), which indicates that the level of influence is high. This may be due to the great attention that companies are giving to the role of organizational knowledge, given its active role in the knowledge economy, which may contribute to serving society and achieving development and progress in the field of corporate social responsibility.

Table (8): Factors that measure Technological knowledge

Questionnaire topics	N	Mean	SD	Sig.	Impact level	Ranking
The organization relies on modern information systems.	144	4.23	0.588	0.000	high	1
The organization uses technology to support decision-making.	144	4.06	0.661	0.000	high	4
The digital technologies used by the organization contribute to improved performance.	144	4.23	0.717	0.000	high	3
Databases are used to store knowledge within the organization.	144	4.23	0.655	0.000	high	2
The organization keeps pace with all modern technological developments used globally.	144	4.06	0.750	0.000	high	5
All	144	4.16	0.674	0.000	high	

Source: The Authors, according to the outputs of SPSS V.28

After calculating the mean and standard deviation of the answers to the variables of the technological knowledge, it became clear that the phrases “The organization relies on modern information systems.”, and “The digital technologies used by the organization contribute to improved performance” and “Databases are used to store knowledge within the organization” obtained the highest average (4.23), while the phrases “The organization uses technology to support decision-making” and “The organization keeps pace with all modern technological developments used globally.” obtained the lowest average and its value is (4.06).

As noted in Table (8), the average response of all sample members to all statements regarding the axis of the technological knowledge is equal to (4.16). This value is higher than the average value of the scale, indicating that there is agreement from all sample members regarding the axis’ statements in general, and this agreement is high “all the answers of questions more than (3.41)” which indicate that the impact level according to the five-point Likert scale is high. The t-test analysis of the single sample also indicated the presence of a statistically significant difference, as it is less than (0.05). This indicates that the average response score to the axis of technological knowledge differs fundamentally from the average approval score (3), indicating that the technological knowledge has clear contributions to supporting knowledge economy, varying in importance. As all questions on the technological knowledge had averages more than (3.41), which indicates that the level of influence is high. This may be due to the great attention that companies are giving to the role of technological knowledge, given its active role in the knowledge

economy, which may contribute to serving society and achieving development and progress in the field of corporate social responsibility.

Table (9): Knowledge management practices

Questionnaire topics	N	Mean	SD	Sig.	Impact level	Ranking
The organization has the ability to generate the knowledge it needs from multiple sources.	144	4.13	0.698	0.000	high	2
Knowledge is stored in organized and easily accessible ways.	144	4.04	0.892	0.000	high	3
The organization's top/middle management encourages knowledge sharing between departments.	144	3.98	0.832	0.000	high	4
The organization applies knowledge to problem-solving and decision-making continuously.	144	3.79	0.868	0.000	high	5
Knowledge management contributes to improving the overall performance of the organization.	144	4.19	0.669	0.000	high	1
All	144	4.03	0.791	0.000	high	

Source: The Authors, according to the outputs of SPSS V.28

After calculating the mean and standard deviation of the answers to the variables of the knowledge management practices, it became clear that the phrase “knowledge management contributes to improving the overall performance of the organization.” obtained the highest average (4.19), while the phrase “The organization applies knowledge to problem-solving and decision-making continuously.” obtained the lowest average and its value is (3.79).

As noted in Table (9), the average response of all sample members to all statements regarding the axis of the knowledge management practices is equal to (4.03). This value is higher than the average value of the scale, indicating that there is agreement from all sample members regarding the axis’ statements in general, and this agreement is high “all the answers of questions more than (3.41)” which indicate that the impact level according to the five-point Likert scale is high. The t-test analysis of the single sample also indicated the presence of a statistically significant difference, as it is less than (0.05). This indicates that the average response score to

the axis of knowledge management practices differs fundamentally from the average approval score (3), indicating that the knowledge management practices have clear contributions to supporting knowledge Economy, varying in importance. As all questions on the knowledge management practices had averages more than (3.41), which indicates that the level of influence is high. These results may be attributed to the increasing focus of organizations on knowledge management as a strategic tool for enhancing performance and gaining a competitive advantage. Effective knowledge management supports organizational learning and efficiency through the optimal use of knowledge. The high degree of consensus among participants reflects an organizational climate that encourages knowledge sharing and innovation.

However, some challenges exist in translating knowledge into practical applications, often related to structural or cultural barriers. Overall, the findings indicate that while knowledge management practices are valued, gaps remain in their practical application, particularly in decision-making processes.

Table (10): Corporate Social Responsibility

Questionnaire topics	N	Mean	SD	Sig.	Impact level	Ranking
The organization seeks to support the economic development of the community.	144	3.94	0.830	0.000	high	6
The organization works to create job opportunities for members of the community.	144	3.96	0.708	0.000	high	4
The organization adheres to the laws and regulations governing work.	144	4.23	0.717	0.000	high	1
The organization respects workers' rights.	144	3.96	0.818	0.000	high	5
I believe the organization adheres to the principles of transparency and integrity.	144	3.94	0.855	0.000	high	7
The organization is committed to fairness in dealing with stakeholders.	144	3.88	0.907	0.000	high	9
The organization contributes to supporting community initiatives.	144	4.19	0.784	0.000	high	2
The organization is keen to contribute to providing charitable aid.	144	3.90	0.922	0.000	high	8

Questionnaire topics	N	Mean	SD	Sig.	Impact level	Ranking
The organization is committed to ethical practices at work.	144	4.15	0.793	0.000	high	3
All	144	4.02		0.000	high	

Source: The Authors, according to the outputs of SPSS V.28

After calculating the mean and standard deviation of the answers to the variables of the Corporate Social Responsibility, it became clear that the phrases “The organization adheres to the laws and regulations governing work.” obtained the highest average (4.23), while the phrase “The organization is committed to fairness in dealing with stakeholders.” obtained the lowest average and its value is (3.88).

As noted in Table (10), the average response of all sample members to all statements regarding the axis of the Corporate Social Responsibility is equal to (4.02). This value is higher than the average value of the scale, indicating that there is agreement from all sample members regarding the axis’ statements in general, and this agreement is high “all the answers of questions more than (3.41)” which indicate that the impact level according to the five-point Likert scale is high. The t-test analysis of the single sample also indicated the presence of a statistically significant difference, as it is less than (0.05). This indicates that the average response score to the axis of Corporate Social Responsibility differs fundamentally from the average approval score (3), The high average responses to CSR items may be attributed to organizations' growing awareness and commitment to ethical practices and regulatory compliance. Conversely, the low level of equity towards all stakeholders may indicate challenges in consistently implementing equitable practices across all relationships.

These findings are consistent with previous studies highlighting the role of organizational culture and knowledge management in promoting CSR. For example, Bolisani and Bratiano (2022) demonstrated that knowledge-based practices enhance organizational accountability and social responsibility, while knowledge sharing and innovation foster ethical and sustainable organizational behavior. They also noted that effective organizational knowledge management contributes to transparent and responsible decision-making. Overall, the results suggest that organizations recognize the importance of CSR and its integration with knowledge management practices, although some aspects, such as equity towards all stakeholders, may require further focus to achieve consistent implementation.

Verifying study hypotheses:

First hypothesis:

Verification of sub-hypothesis (1.1):

To verify that there are statistically significant differences in the impact of human knowledge on corporate social responsibility.

The results of the statistical analysis of the hypothesis aimed to test whether the human knowledge has a statistically significant effect on corporate social responsibility (CSR) in Saudi organizations. To verify this hypothesis, Pearson's correlation coefficient and simple linear regression were used to determine the nature and strength of the relationship.

The correlation results showed a strong positive relationship between human knowledge and CSR, with a correlation coefficient of ($r = 0.734$) at a significance level of ($\text{Sig} = 0.000$), confirming a statistically significant relationship between the two variables.

Furthermore, the regression analysis revealed a multiple correlation coefficient (R) of (0.734) and a coefficient of determination (R^2) of (0.539), indicating that human knowledge explains approximately 53.9% of the variance in the level of CSR, with the remaining percentage attributed to other factors. The adjusted coefficient of determination was (0.535), reflecting the suitability of the statistical model and its acceptable ability to explain the relationship. The Durbin-Watson coefficient (2.150) was within acceptable limits, indicating no autocorrelation between the errors.

The results of the analysis of variance (ANOVA) showed an F-value of 165.790 at a significance level of 0.000, confirming the significance of the regression model and its validity in explaining the relationship. The non-standard regression coefficient was 0.713 (positive), while the standardized coefficient was 0.734 ($\text{Beta} = 0.734$), and the t-value was 12.876 at a significance level of 0.000, confirming a significant positive effect of human knowledge on corporate social responsibility.

Therefore, the results indicate that the higher the level of human knowledge within organizations, the more it leads to increased social responsibility practices.

This finding reflects the importance of human knowledge as a cornerstone of the knowledge economy. Human capital, with its expertise, skills, and innovative capabilities, contributes to raising organizational awareness of its social responsibility, supporting the adoption of social and environmental initiatives, and achieving a balance between economic and social objectives. Based on the above, the study's first hypothesis, which states that human knowledge has a statistically significant impact on corporate social responsibility in Saudi organizations, is accepted.

Verification of sub-hypothesis (1.2):

To verify that there are statistically significant differences in the impact of organizational knowledge on corporate social responsibility.

The results of the statistical analysis of the hypothesis, which aimed to test whether there are statistically significant differences in the impact of organizational knowledge on corporate social responsibility (CSR) in Saudi organizations. To verify this hypothesis, Pearson's correlation coefficient and simple linear regression were used to measure the nature and strength of the relationship between organizational knowledge -as a component of the knowledge economy- and corporate social responsibility (CSR). The correlation results showed a strong positive relationship between the two variables, with a correlation coefficient of ($r = 0.795$) at a significance level of ($Sig = 0.000$), confirming the statistical significance of the relationship.

The regression results also showed a multiple correlation coefficient of ($R = 0.795$) and a coefficient of determination ($R^2 = 0.632$), indicating that organizational knowledge explains approximately 63.2% of the variance in the level of CSR, while the remaining percentage is attributed to other factors. The adjusted coefficient of determination ($R^2 = 0.630$) is close to (R^2), reflecting the model's quality and acceptable explanatory power. The Durbin-Watson coefficient (1.979) was also within acceptable limits, indicating the absence of autocorrelation between errors.

The results of the analysis of variance (ANOVA) showed an F-value of 243.990 at a significance level of 0.000, confirming the significance of the regression model. The non-standardized regression coefficient ($B = 0.700$) was positive, indicating a positive effect of organizational knowledge on social responsibility, where a one-unit increase in organizational knowledge leads to a 0.700 increase in the level of social responsibility. The standardized coefficient ($Beta = 0.795$) and the t-value ($t = 15.620$) at a significance level of 0.000 further confirm a strong and significant effect of organizational knowledge on corporate social responsibility.

These results reflect the strategic importance of organizational knowledge as a cornerstone of the knowledge economy. It contributes to enhancing organizational learning processes and the exchange of knowledge and expertise within organizations, thereby supporting their ability to integrate social responsibility principles into their various strategies and activities, and strengthening their role in achieving sustainable development and serving the community. Based on the above, the hypothesis that organizational knowledge has a statistically significant impact on corporate social responsibility in Saudi organizations is accepted.

Verification of sub-hypothesis (1.3):

To verify that there are statistically significant differences in the impact of technological knowledge on corporate social responsibility.

The results of the statistical analysis of the hypothesis, which aimed to test whether there are statistically significant differences in the impact of technological knowledge on corporate social responsibility Saudi organizations. To verify this hypothesis Pearson's correlation coefficient and simple linear regression were used, relying on Model Summary, ANOVA, and Coefficients tables, in addition to residual statistics to validate the model.

The correlation results showed a moderate to strong positive relationship between technological knowledge and CSR, with a correlation coefficient of ($r = 0.649$) at a significance level of 0.000. This indicates a statistically significant relationship, reflecting that higher levels of technological knowledge are associated with increased adoption of CSR practices.

The regression results also showed a multiple correlation coefficient of ($R = 0.649$) and a coefficient of determination ($R^2 = 0.421$), meaning that technological knowledge explains approximately 42.1% of the variance in CSR, while the remaining percentage is attributed to other factors. The adjusted coefficient of determination (CID) was 0.417, confirming the model's quality and acceptable explanatory power. The Durbin-Watson coefficient (2.272) was also within acceptable limits, indicating no autocorrelation of the residuals.

The results of the analysis of variance (ANOVA) showed an F-value of 103.381 at a significance level of 0.000, confirming the significance of the regression model. The non-standard regression coefficient ($B = 0.708$) and the standard regression coefficient (Beta = 0.649), while the t-value (10.168) at a significance level of 0.000, indicate a significant positive effect of technological knowledge on social responsibility.

The residual statistics also showed that the values were distributed around zero and within an acceptable range, and that the expected values came within a moderate range, which indicates that the basic assumptions of regression were met in terms of the independence of errors, the homogeneity of variance, and the distribution's proximity to normality, which enhances the model's reliability in explaining the relationship between the two variables.

Based on all the above results, it can be confirmed that technological knowledge is one of the factors that positively and statistically significantly influence the promotion of corporate social responsibility in Saudi organizations. Therefore, the first hypothesis regarding the existence of an effect of technological knowledge on social responsibility is accepted, taking into account that technological knowledge contributes to improving institutional efficiency, supporting institutional innovation, and facilitating management processes and community initiatives, reflecting its vital role within the knowledge economy in supporting corporate social responsibility.

Based on the above, it can be confirmed that all three dimensions of knowledge (human, organizational, and technological) represent positive and statistically significant factors in promoting corporate social responsibility in Saudi organizations, noting that organizational knowledge is the most influential compared to human and technological knowledge, followed by human knowledge and then technological knowledge, which reflects the strategic role of each dimension of knowledge in supporting social responsibility policies and enhancing the commitment of institutions to society within the framework of the knowledge economy.

The second main hypothesis is: There are statistically significant differences in the impact of the knowledge economy on knowledge management practices.

The following are the sub-hypotheses emerge from it:

- There are statistically significant differences in the impact of human knowledge on knowledge management practices.

2. Second hypothesis

Verification of sub-hypothesis (2.1):

To verify that there are statistically significant differences in the impact of human knowledge on knowledge management practices.

The results of the statistical analysis of the hypothesis, which aimed to test the existence of a statistically significant effect of human knowledge on knowledge management practices in Saudi organizations. Descriptive statistics showed that the mean score for knowledge management practices was 4.0250 with a standard deviation of 0.68383, while the mean score for human knowledge was 3.954 with a standard deviation of 0.658, indicating relatively high levels for both variables within the sample.

The results showed a moderate positive correlation between the two variables. Pearson's correlation coefficient ($r = 0.553$) at a significance level of ($\text{Sig} = 0.000$) indicated that a higher level of human knowledge among employees is associated with a relative improvement in the application of knowledge management practices. The results of the linear regression analysis also showed an overall correlation coefficient ($R = 0.553$) and a coefficient of determination ($R^2 = 0.306$), meaning that human knowledge explains approximately 30.6% of the variance in knowledge management practices, while the remaining percentage is attributed to other organizational or technological factors not included in the model. The adjusted coefficient of determination ($R^2 = 0.301$) was close to its original value, reflecting the stability and acceptability of the statistical model. The Durbin-Watson coefficient ($DW = 2.202$) indicates the absence of autocorrelation among the residuals.

On the other hand, the results of the analysis of variance (ANOVA) confirmed the statistical significance of the model, with an F-value of 62.633 at a significance level of 0.000. This indicates the model's ability to explain the relationship between human knowledge and knowledge management practices in a statistically significant way. Furthermore, the regression coefficients showed a significant positive effect of human knowledge, with an unstandardized coefficient of 0.574 and a standardized coefficient of 0.553, resulting in a t-value of 7.914 at a significance level of 0.000. This suggests that any improvement in the level of human knowledge contributes to enhancing knowledge management practices within organizations.

Regarding the examination of the model assumptions, the residual statistics showed that the values were distributed around the zero mean with a standard deviation of 0.56964, ranging between -1.22187 and 1.72524. The standard values for the residuals were also within a statistically acceptable range (± 3), ranging between -2.137 and 3.018, with no significant outliers, although one value approached the upper limit without affecting the model's stability. The expected values also reflected a moderate range, further enhancing the reliability of the results.

Based on what mentioned above, it can be concluded that human knowledge represents a statistically significant and positive factor in promoting knowledge management practices within Saudi organizations. However, the strength of this influence remains moderate compared to other potential factors. This supports the acceptance of the hypothesis and simultaneously underscores the pivotal importance of human capital as a fundamental input for activating knowledge management systems within the knowledge economy.

Verification of sub-hypothesis (2.2):

To verify that there are statistically significant differences in the impact of organizational knowledge on knowledge management practices.

This hypothesis aimed to test whether organizational knowledge has a statistically significant effect on knowledge management practices in Saudi organizations. Descriptive statistics showed that the mean score for knowledge management practices was 4.025 with a standard deviation of 0.683, while the mean score for organizational knowledge was 3.841 with a standard deviation of 0.728, indicating relatively high levels for both variables within the sample.

The results of the Pearson correlation coefficient showed a strong positive correlation between organizational knowledge and knowledge management practices ($r = 0.729$, $\text{sig} = 0.000$), reflecting the strength and positive direction of the relationship. This indicates that increased organizational knowledge is associated with improved knowledge management practices.

Turning to the (Model Summary), the overall correlation coefficient was ($R = 0.729$), while ($R^2 = 0.532$) and (Adjusted $R^2 = 0.529$). This indicates that organizational knowledge explains approximately (53.2%) of the variance in knowledge management practices, with an acceptable error of estimation (Std. Error

= 0.46955) and (Durbin–Watson Ratio = 2.059), confirming the independence of the residuals and the absence of autocorrelation.

The ANOVA analysis showed that the model was statistically significant, with ($F = 161.302$, $Sig = 0.000$), indicating that the variance explained by organizational knowledge is much larger than the random variance, and that the relationship between the two variables is not due to chance.

Turning to the regression coefficients, the analysis showed that $B = 0.685$, $Beta = 0.729$, $t = 12.700$, and $Sig = 0.000$, indicating that each one-unit increase in organizational knowledge leads to a 0.685-unit increase in knowledge management practices. This demonstrates a strong, positive, and statistically significant effect of the independent variable.

Finally, the residuals statistics showed that the expected values ranged from 2.7638 to 4.6813, with a mean of 4.0250. The residuals ranged from -1.12254 to 1.36228, with a zero mean and a standard deviation of 0.46790. This indicates that the deviations are evenly distributed around zero, and there are no outliers affecting the model's validity, thus supporting the assumptions of linear regression. Based on these results, it can be definitively concluded that organizational knowledge positively and statistically significantly impacts knowledge management practices in Saudi organizations. This reinforces the importance of the organizational dimension in the knowledge economy as a fundamental pillar for improving knowledge management performance and maximizing the utilization of knowledge resources within institutions.

Verification of sub-hypothesis (2.3):

To verify that there are statistically significant differences in the impact of technological knowledge on knowledge management practices.

The descriptive results showed that the mean level of knowledge management practices was 4.0250 with a standard deviation of 0.68383, while the mean level of technological knowledge was 4.1625 with a standard deviation of 0.58750, indicating relatively high levels for both variables among the 144 participants in the sample. Correlation analysis revealed a strong positive relationship between technological knowledge and knowledge management practices, with a Pearson coefficient ($r = 0.834$) and high statistical significance ($Sig. = 0.000$), indicating that the correlation between the two variables is statistically significant at the 95% confidence level.

The results of the (Model Summary) showed an overall correlation coefficient (R) of 0.834 and a coefficient of determination (R^2) of 0.695, meaning that 69.5% of the variance in knowledge management practices can be explained by technological knowledge. The R^2 adjustment coefficient (R^2) of 0.693 confirms the robustness of the model and the reliability of the technological knowledge impact estimates. Furthermore, $Std. Error = 0.37897$ and (Durbin-Watson = 1.800) indicate a good fit for the model and the absence of autocorrelation among the residuals.

The results of (ANOVA) confirmed the high statistical significance of the model, with ($F = 323.601$) and ($\text{Sig.} = 0.000$), demonstrating that the model largely explains the variance in knowledge management practices and that the relationship between technological knowledge and the dependent variable is not a statistical coincidence.

The regression coefficients showed that technological knowledge has a significant positive impact on knowledge management practices. The unstandardized coefficient was $B = 0.970$, with a standardized coefficient $\text{Beta} = 0.834$, $t = 17.989$, and statistical significance $\text{Sig.} = 0.000$. This indicates that each one-unit increase in technological knowledge is associated with a 0.970-unit increase in knowledge management practices, with the constant being not statistically significant (-0.014 , $\text{Sig.} = 0.950$).

Finally, (Residuals Statistics) showed that the residuals were distributed around zero ($\text{Mean} = 0.00000$) with a standard deviation of 0.37765, and standard values ranging from -2.336 to 2.895. This confirms the assumptions of linear regression, such as the independence of the residuals and the absence of outliers, and reinforces the reliability of the model's findings.

Based on these indicators, it can be concluded that technological knowledge is a significant and statistically significant factor in improving knowledge management practices within Saudi organizations, thus reinforcing the strategic role of organizational investments in technological and knowledge infrastructure.

3. Verification of hypothesis (3):

To verify that there are statistically significant differences in the impact of Knowledge management practices on corporate social responsibility

The results of the statistical analysis for the third hypothesis, which sought to test the statistically significant effect of knowledge management practices on corporate social responsibility (CSR) in Saudi organizations, showed a strong positive correlation between the two variables. Pearson's correlation coefficient ($r = 0.741$) at a significance level of ($\text{Sig} = 0.000$) indicated that enhancing knowledge management practices is associated with a higher level of CSR adoption. The results of the linear regression analysis also showed an overall correlation coefficient ($R = 0.741$) and a coefficient of determination ($R^2 = 0.549$), indicating that approximately 54.9% of the variance in CSR can be explained by knowledge management practices, while the remaining percentage is attributed to other variables outside the model. The adjusted coefficient of determination ($R^2 = 0.546$) demonstrated the stability of the statistical model, and the Durbin-Watson value (2.066) was within acceptable limits, confirming the absence of autocorrelation among random errors.

On the other hand, analysis of variance (ANOVA) showed that the model possesses a high degree of statistical significance, with an F-value of 172.689 at a significance level of 0.000. This confirms the model's ability to explain changes in the level of social responsibility based on knowledge management practices.

Furthermore, the regression coefficients revealed that knowledge management practices have a statistically significant positive impact on social responsibility, with an unstandardized coefficient of 0.694 and a standardized coefficient of 0.741, resulting in a t-value of 13.141 at a significance level of 0.000. This indicates that any improvement in the application of knowledge management practices leads to a tangible increase in the level of social responsibility.

Regarding the model validity test, the residuals statistics showed that the values were evenly distributed around zero, with a mean residual of 0.000 and a standard deviation of 0.43043. The values ranged from -0.94086 to 1.00322, and the standard values for the residuals were within acceptable limits (± 3), indicating the absence of significant outliers. The model's predicted values also reflected a good degree of consistency, confirming the linear regression assumptions of independence and homogeneity of variance.

Based on the above results, it can be concluded that knowledge management practices represent a crucial variable with a statistically significant positive impact on enhancing corporate social responsibility. This supports the second hypothesis and underscores the strategic importance of adopting knowledge management practices to support organizations' efforts to achieve the dimensions of social responsibility within the knowledge economy.

Results:

The main results of the study can be concluded as follows:

1. The study shows that the percentage of females was (54.9%) which is the highest percent. Also, the experience years more than six years was (77.1%) which is the highest percent.
2. The administrative level shows executive management for 29.9%, also the sector type shows that the commercial sector was (42.4%) which is the higher percent. Regarding organizational size, medium-sized organizations comprised the largest share (60.6%).
3. In the axis of the knowledge economy, it was found that the average response of all sample members to all axis statements was equal to (4.01, 3.88, 4.16) for human knowledge, organizational knowledge and technological knowledge respectively and the t-test analysis for the single sample indicates the presence of a statistically significant difference because it is less than (0.05).
4. Regarding the axis of the knowledge management practices it was found that the average response of all sample members to all the axis statements was equal to (4.03), and this value is higher than the average value of the scale. The t-test analysis for the single sample indicated the presence of a statistically significant difference because it is less than (0.05).
5. Regarding the axis of the corporate social responsibility it was found that the average response of all sample members to all the axis statements was equal to (4.02), and this value is higher than the average value of the scale. The t-test analysis for the single sample indicated the presence of a statistically significant difference because it is less than (0.05).

Recommendations

Based on the findings of the study, several recommendations can be made to optimize the study environment and enhance academic performance:

1. Enhancing the application of the knowledge economy within organizations
2. Integrating social responsibility into organizational strategies
3. Leveraging knowledge management to support social responsibility initiatives
4. Utilizing digital technologies and innovation to support social responsibility
5. Developing indicators to measure the impact of the knowledge economy on social responsibility
6. Exploring the role of digital transformation and artificial intelligence in strengthening the relationship between the knowledge economy and organizational social responsibility.

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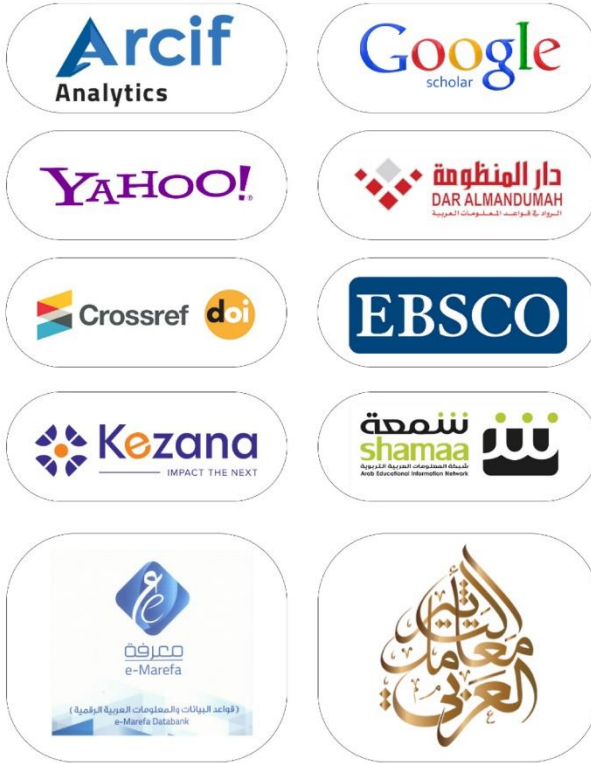
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2025	2024	2023	2022	2021	العام
0.5978	0.3068	0.3759	0.1954	0.2692	معامل أرسيف
1.59	1.55	1.25	1.73	1.60	معامل التأثير العربي