

The Impact of Information Quality on the Construction of Sustainable Social Knowledge- An descriptive- Analytical Study of Iraqi Private Universities

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ABSTRACT

This study aims to examine the impact of information quality variable (accuracy, Recency reliability completeness, accessibility)on the construction of sustainable social knowledge in Iraqi private universities by analyzing the extent to which educational institutions rely on accurate and reliable information systems that contribute to promoting sustainable knowledge among individuals, and to achieve aim study, The researcher modified to the(Noguera scale) , A descriptive-analytical approach was used, and an online questionnaire was administered to a sample of 250 individuals at five Iraqi private universities with Analysis Method: SPSS 26 statistical software. The results showed that the quality of information in terms of (accuracy, Recency, reliability, Completeness and accessibility) has a positive and statistically significant impact on the construction of sustainable social knowledge And adopt periodic indicators to measure information.

Key word: Information quality, Sustainable social knowledge ,Reliability, Accessibility, Completeness.

INTRODUCTION

High-quality information is one of the fundamental cornerstones of a sustainable knowledge society. Amid the digital transformations taking place in higher education, the importance of information quality has emerged as a key factor in the development of social knowledge and the promotion of academic and community sharing.

This study seeks to analyze the relationship between the quality of information and its role in the construction of sustainable social knowledge within Iraqi private universities in the era of globalization and rapid Knowledge and technological transformations, Knowledge is no longer merely a tool for information or education, but a strategic resource for social, economic, and cultural development in equal measure.

In the context of sustainable development, knowledge must be sustainable—that is, it must be produced, shared, and applied within a social framework that takes future generations into account and strengthens society's capacity for transformation and creativity. This study also discusses the concept of “sustainable social knowledge,” examines its dimensions, factors, and areas of application, and explores how to build a knowledge-based society capable of achieving sustainable development. The study will consist of several sections, beginning with the concept of knowledge and the knowledge-based society, then moving on to social sustainability, and then addressing the relationship between knowledge and social sustainability, and finally, proposals and policies to promote sustainable social knowledge.

STUDY METHODOLOGY

This chapter addresses the fundamental concepts of research methodology, previous studies, information quality, and sustainable social knowledge. Information quality is defined as the extent to which information meets users' requirements in terms of accuracy, Recency, reliability completeness, accessibility; Sustainable social knowledge, on the other hand, is knowledge that contributes to long-term community development through knowledge sharing and the promotion of academic.

Previous Studies

No studies addressing the specific focus of this research were identified, except for two studies that are somewhat related to the current research topic. These two recent studies indicate that information quality is a fundamental element in building knowledge capital and enhancing institutional sustainability in universities. For example, a study by (Al-Hashimi ,2022) showed that information quality has a direct positive effect on sustainable knowledge with a correlation coefficient of 0.68, while(Al-Khafaji's ,2023) study demonstrated that the quality of university information contributes to improving knowledge exchange with a correlation coefficient of 0.72. Thus, we observe that only two studies indicate that information quality is a key factor in building knowledge capital and achieving institutional sustainability in the university environment.

Study Problem

The research problem is encapsulated in the following central question: What is the impact of information quality on the development of sustainable social knowledge in Iraqi private universities?

This gives rise to a set of sub-questions related to the extent to which the dimensions of information quality (Accuracy, Reliability, Recency, Completeness and Accessibility) As follows:-

1. What is the level of relationship between the accuracy of information and the building of sustainable social knowledge?
2. What is the level of relationship between the recency of information and the building of sustainable social knowledge?
3. What is the level of relationship between the reliability of information and the building of sustainable social knowledge?
4. What is the level of relationship between the Completeness of information and the building of sustainable social knowledge?
5. What is the level of relationship between the accessibility of information and the building of sustainable social knowledge?

The significance of Study

1. The quality of information is one of the most important assets on which societies can build their future, as reflected in studies on “the importance of information quality in achieving sustainable development.
2. Understanding how to make information quality (sustainable) meaning that it is sustained and utilized over the long term and contributes to social development is vital for societies facing challenges such as poverty, unemployment, knowledge gaps, and technological change.
3. This research helps provide a conceptual and operational framework that decision-makers, researchers, and social actors can use to develop knowledge-based policies that take into account information quality and sustainability.

Study Objectives

1. To define the concepts of “information quality” and “sustainable social knowledge.
2. To analyze the dimensions encompassed by these concepts.
3. To explore the relationship between information quality and social sustainability and sustainable development.
4. To propose recommendations and policies for promoting sustainable social knowledge in societies, with a focus on the Arab or Iraqi context, if possible.

Research Methodology

The study adopted a descriptive-analytical approach due to its suitability for the nature of the study. An online

questionnaire was distributed to a sample of 250 faculty members at five private Iraqi universities. The data were analyzed using SPSS software through correlation coefficients and simple regression tests.

Questionnaire Design

A questionnaire including of main dimensions (*Quality of Information (accuracy, Completeness, recency, reliability, accessibility and Sustainable Social Knowledge, And A questionnaire was designed with two main sections:*

1. Section 1: General data (age, gender, job level, years of experience).
2. Section 2: Items measuring the study variables according to a five-point Likert scale (from 1 = strongly disagree to 5 = strongly agree).

Design of Study Scale

The scale Nogueira, et al, served as the basis for the questionnaire's development and construction, which the research scientist then altered to fit the study's Variable . (45–46: Nogueira, et al., 2023: 45–46)

To evaluate quality of the information, an assessment questionnaire was created. The evaluation scales and free-form text responses allow respondents to share their thoughts and comments. The following investigations about various facets of information quality are included in the questionnaire scale (Study variables):-

1.Accessibility

The information Available 's content is readily available, and satisfy needs.

2. Relevance

The information Available 's content is simple to comprehend and analyze.

3. Recency

The information Available 's content is sufficiently current. The the information Available are presented succinctly, which means they don't include extraneous details and contain just the right amount of detail .

4. Completeness

The information Available 's content is complete, which means it has all the information required to be of use.

5. Reliability

This has to do with the the information Available being trustworthy for making choices or finishing assignments.

The researcher distributed survey forms electronically to respondents, who subsequently shared their answers and comments on their individual Gmail accounts. Participation was encouraged by this level of freedom.

Sample and Data Collection Procedures

Faculty members at Iraqi private universities, and the Sample represent : A random sample of 250 faculty members, electron questionnaire was used to collect data and observe employees' experiences and attitudes, of 250 individual in private universities The study employed means and confirmatory factor analysis using SPSS 26 statistical software.

Reliability and Validity

Reliability and validity were verified using Cronbach's alpha = 0.88, indicating high internal consistency.

Study Hypotheses

Main Hypothesis: *There is a statistically significant relationship between information quality and the development of sustainable social knowledge in Iraqi private universities.*

The study also includes the following **sub-hypotheses**:

1. *There is a relationship between information accuracy and the development of sustainable social knowledge.*
2. *There is a relationship between the recency of information and the construction of sustainable social knowledge.*
3. *There is a relationship between the reliability of information and the construction of sustainable social knowledge.*
4. *There is a relationship between the Completeness of information and the construction of sustainable social knowledge.*
5. *There is a relationship between the accessibility of information and the construction of sustainable social knowledge.*

INFORMATION QUALITY

The Concept of Information Quality

In this era of globalization and rapid knowledge-based and technological transformations, knowledge is no longer merely a tool for information or education, but a strategic resource for social, economic, and cultural development alike. In the context of sustainable development, knowledge must be sustainable—that is, it must be produced, shared, and applied within a social framework that takes future generations into account and enhances society's capacity for transformation and creativity.

There is no single, universally accepted definition of “information quality,” as the concept of quality varies depending on the perspective of the information producer or user. Some define data quality (which is linked to information quality) as the extent to which a dataset meets criteria such as accuracy, completeness, consistency, timeliness, and fitness for purpose. Others define information quality as information that can be considered high-quality “if it is suitable for its intended use in operations, decision-making, and planning.” Some studies indicate that information quality directly affects the quality of research or decision-making; for example: “good information quality entails good research. Information quality can be defined as information that is fit for use by information, we have found many different approaches to defining information quality as :-

Information quality is the characteristic of information to meet or exceed customer expectations. (Kahn& Stong, 1998)

Information quality can be defined as information that is fit for use by information consumers.(Huang.etal, 1999)

Quality information is information that meets specifications or requirements. (Kahn& Stong, 1998)

Information quality is the characteristic of information to be of high value to its users. (Lesca&Lesca,1995)

The degree to which information has content, form, and time characteristics which give it value to specific end users. (Miller,1996.79-82)

Dimensions of Information Quality

The dimensions of information quality can be divided into several characteristics, including the following:

- **Accuracy:** The information reflects reality or is free of errors.
- **Recency:** Information is available at the right time, before it becomes obsolete. (Ali Hamdi & Bachir Ben Aichi ,2011; 99–102)
- **Completeness:** Information covers all required elements without omission. (Nogueira,etal ; 2023;45)
- **Reliability:** The source of the information is reputable, and the information is verifiable.

- **Accessibility:** The information is relevant to the user's purpose and decision-making. (Fawzia. etai ,2016,p; 11).

This means The information must be accessible to those who need it, while ensuring security and confidentiality where necessary.

The Impact of Information Quality on Decision-Making

- High-quality information enables decision-makers to make well-founded decisions, whereas poor-quality information may lead to incorrect or ineffective decisions. (Alshikhi, and abdullah,2018;36-42)
- A study on “The Impact of Management Information Quality” in organizations found that organizations that manage their information more efficiently achieve better performance.
- Recent studies also show that users (such as college students) may not be able to assess the quality of electronic information sources, exposing them to the risk of relying on incomplete or inaccurate information. (Scherer, et al.2026;73)

Challenges to Achieving Information Quality

- Technology projects can transform the municipality or improve relations with citizens across a variety of areas; the obstacles to digital transformation are highlighted below: – (Al-Hafnawi, 2021)
- The huge volume and diversity of information make it difficult to control its quality. (Ge& Helfert,2007).
- The lack of a data system is a major reason why municipalities struggle to make a smooth transition to digitalization. Insufficient data makes it impossible to fully understand the problem, leaving the municipality without the necessary means to address the service issue. Accessing adequate information and understanding the problem effectively means the root cause has already been identified; all that remains is to find a solution. (Al-Mubaideen, 2022).
- Changing contexts and varying user requirements make it difficult to define a single standard for information quality—what is “good” for one user may not be so for another.
- Inability to experiment quickly: The inability to experiment quickly is the greatest obstacle to digital transformation. This is largely linked to the reluctance of municipalities to break away from the way they have done things for years. (Hayek, 2022).
- The cost and resources required to manage and ensure information quality may be high for some institutions.

SUSTAINABLE SOCIAL KNOWLEDGE

The Concept of Sustainable Social Knowledge

In connecting knowledge with sustainability, two concepts are introduced: knowledge of sustainability (KoS), which refers to the sustainability content of knowledge, and sustainability of knowledge (SoK), which denotes the dynamics of the continuing process of knowledge creation and application

Sustainable social knowledge is the body of understanding, skills, and community experiences that are accumulated, shared, and used in ways that serve the well-being of current and future generations. This type of knowledge is not limited to merely collecting facts; rather, it involves developing a flexible and adaptive way of understanding the world, ensuring that the knowledge remains useful and relevant in the long term.

(Faber, etal. 2010;8–22)

The Importance of Sustainable Social Knowledge

Sustainable social knowledge is essential for achieving comprehensive and sustainable development, and its importance includes the following:

1. **Decision-making:** It provides decision-makers with the data and information necessary to formulate effective policies that take into account the needs of both current and future generations.

2. The sustainable knowledge societies apply the accumulated knowledge (Sztangret, 2016)
3. Community Development: It contributes to building resilient and prosperous communities by achieving social justice, improving quality of life, and strengthening social cohesion
4. The most important of all is that they employ knowledge accumulated by the other communities and in such a way quickly progress and acquire advantages. This reveals the evident importance of cooperation and knowledge sharing(Sbarcea, 2007).
5. Education and Awareness: It helps raise awareness of sustainability issues and empowers individuals with the knowledge and skills needed to make responsible decisions.
6. The development of knowledge management and practical activity is continuing and expanding in all modern organizations. The greater need to find competitive advantages through knowledge appears due to the knowledge management progress. Competitive advantage can be acquired in many ways: the occupied position, access to resources or direct success (Halawi, Aronson and McCarthy, 2005)

Dimensions and Factors of Sustainable Social Knowledge

The Sustainable Development Goals (SDGs) integrate social, economic, and environmental dimensions, highlighting a balanced and interconnected approach to development, as follows: (Van der, 2024; 113)

- **Knowledge and Technology:**
information and communication infrastructure, access to knowledge, education and training, and scientific research. (Harris, 2003)
- **The Socio-Cultural Dimension:**
This includes the culture of knowledge: such as how knowledge is used in daily life, social decision-making, civic engagement, community participation, knowledge collaboration, and the collaborative production of knowledge.
- **The Institutional and Administrative Dimension:**
This includes educational and research institutions, government, and civil society, and their roles in the field of knowledge. It also considers knowledge policies and knowledge management: how institutions produce and use knowledge.
- **The Economic and Environmental Dimension (Kanar, 2021)**
Knowledge as an Economic Resource: Knowledge assets contribute to sustainable development, and also Knowledge and the Environment, such as How does knowledge lead to environmentally and socially sustainable practices, and how are environmental impacts managed within the framework of social knowledge. (Kadhum& Majeed , 2024).

STUDY ANALYTICAL APPROACH

The following are the statistical tables for the analysis:

Descriptive Distribution of the Sample Variable Category Frequency Percentage As shown in the table below (1).

Table (1) shows Distribution of the Sample Variable Category and Frequency Percentage

Variable	Class	Frequency	Percentage
Sex	Male	150	60%
	Female	100	40%
Educational Qualifications	Master's	130	52%
	Doctorate	110	44%

Academic Experience	Less than 5 years	50	20%
	years 10–5	112	45%
	More than 10 years	88	35%

Means and Standard Deviations of Information Quality:

As shown in the table below (2).

Table (2) shows Means and Standard Deviations of Information Quality

Dimension	Mean	Standard Deviation	Rank
Accuracy	4.18	0.62	1
Completeness	4.02	0.67	2
Recency	3.95	0.74	3
Reliability	3.88	0.7	4
Accessibility	3.8	0.68	5
Overall mean	3.97	0.68	—

Correlation Analysis (Pearson)

As shown in the table below(3)

Table (3) shows Correlation Analysis (Pearson)

Relationship	Correlation Coefficient (r)	Significance Level (Sig)	Significance
Information Quality ↔ Sustainable Social Knowledge	0.731	0	Sig
Accuracy ↔ Knowledge Sharing	0.71	0	Sig
Completeness ↔ Collaborative Learning	0.682	0	Sig
Recency ↔ Social Creativity	0.668	0.001	Sig

Impact Analysis: Multiple Linear Regression:

As shown in the table below(4)

Table (4) shows : Multiple Linear Regression

Independent variable	B	T	Sig	Significance
Accuracy	0.312	4.9	0	Sig
Completeness	0.241	3.85	0.001	Sig
Recency	0.198	3.12	0.002	Sig
Reliability	0.175	2.85	0.005	Sig
Accessibility	0.162	2.4	0.016	Sig

Linear Regression Analysis

Table (5) showing Statistical equation:

The variable	β	T	Sig	Result
information quality	0.67	9.75	0	Moral effect

Sustainable social knowledge. = **1.23** + information quality $\times$ **0.67**

Coefficient of determination ($R^2 = 0.67$)

$R^2 = 0.67$, indicating that information quality explains 67% of the variance in sustainable social knowledge.

DISCUSSION OF RESULTS

Through the preceding analytical presentation of the arithmetic means regarding the distributed sample, as well as the correlation and influence relationships between the study variables, we observe that a strong positive relationship between information quality and sustainable social knowledge, Furthermore The dimensions of information quality (accuracy, Completeness and recency) have the greatest impact, While The level of information quality is relatively high but needs improvement in terms of Reliability and accessibility, moreover The absence of standardized information management policies hinders knowledge sharing. Finally a participatory academic culture promotes sustainable social knowledge.

RECOMMENDATIONS & CONCLUSION

Recommendations

1. Adopt a standardized system for managing information quality at private universities.
2. Train academic staff to verify and document information.
3. Establish digital platforms for knowledge exchange.
4. Activate joint research centers to connect knowledge with society.
5. Adopt periodic indicators to measure information quality.
6. Support collaborative scientific research to enhance knowledge sustainability.

Conclusion

In conclusion, it can be said that the quality of information is one of the vital factors influencing the performance of organizations and decision-makers. By focusing on aspects such as accuracy, accessibility, recency, and reliability, it is possible to enhance the ability to make more effective decisions and reduce the risks associated with poor-quality information. However, the challenges in this area are significant and require institutional, technical, and educational attention to ensure that the desired quality of information is achieved.

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