



Information Quality as a Catalyst for Enterprise Networking Effectiveness: Unveiling the Mediating Mechanisms of Strategic Risk Management

Anwar Al-Gasaymeh

College of Administrative Sciences, Applied Science University (ASU), Al Eker, Bahrain

ARTICLE INFO

Keywords:

Information Quality,
Enterprise Networking,
Risk Management,
Telecommunication
Industry

Received: Jun, 19, 2025

Accepted: Aug, 28, 2025

Published: Dec, 25, 2025

ABSTRACT

This study examines the influence of information quality on enterprise networking using risk management as an intervening factor in the telecommunication sector. Based on the increasing importance of information-based decision making, the study would explore the role of accurate, relevant and timely information in contributing to the network capability of an enterprise, and how risk management processes would translate this information into greater cooperation and organizational sustainability. Quantitative research design was adopted and data was gathered using a structured survey that was given to employees in telecommunication firms. The valid responses were then subjected to SPSS to determine validity, reliability, correlations, regressions and mediation effects. The results affirm that the quality of information enhances enterprise networking significantly, whereas the role of risk management partially mediates the relationship by minimizing uncertainties and improving the level of inter-organizational trust. The research also adds to theory and practice in the sense that it presents empirical evidence within an emerging market environment, and it can be said that it offers a practical contribution to telecom managers on the way to use high-quality information and robust risk management practices to develop stronger enterprise networks and remain competitive.

1. INTRODUCTION

The telecommunication industry is central in the process of driving connectivity, innovation, and organizational competitiveness, especially in dynamic markets in the current digital economy that is rapidly evolving. Since telecom companies are becoming more and more dependent on data as the means of decision-making and strategic cooperation, the quality of information has become a decisive factor of organizational success. The quality of information including the aspects of being accurate, relevant, timely and complete has not only allowed firms to make well-informed decisions, but has also been crucial in enterprise networking that is necessary to build partnerships, share resources, and innovate across

organizational boundaries. Nevertheless, the extent to which information quality influences the performance of the networking in complex and high-risk contexts such as the telecommunications where companies are vulnerable to technological disruption, cyber threats, regulatory and market uncertainties may depend on strong risk management efforts. Risk management offers the procedures and systems required to detect, evaluate and alleviate hazards, to transform excellent quality information into practical plans that advance confidence, unpredictability and enhances inter-organizational associations. Regardless of its relevance, there has been a lack of studies that investigate the mediating value of risk

management in the association amid information quality and enterprise networking especially in the telecommunication sector. This paper aims to address this gap by providing empirical research on the role of information quality in enterprise networking and the extent of risk management as an intermediary variable with theoretical contribution to the information systems and risk management literature and practice implications on the part of telecom managers in an ever more competitive and uncertain operating environment.

2. STUDY BACKGROUND

2.1 Information Quality

The framework of information quality generally comprises four primary quality levels. They are the relevance of the criteria, soundness of the criteria, processing of the criteria, and infrastructure. Based on this framework, the whole dimension of information quality stands. Accuracy usually refers to the quality of the provided data. Availability depicts that the provided information is available and ready to be utilized by the analyst. Finally, relevance can be defined as the relevancy of provided and analyzed data based on whether the data has all the required variables, is in the right measure, and is drawn from the population of interest (Al-Mamary, Shamsuddin, & Aziati, 2014).

2.2 Enterprise Networking

An enterprise networking can be defined as a system that helps an enterprise connect, monitor, secure, evaluate and automate the company's operations (Luo, 2022). It is usually done with the help of data management. The general framework consists of virtual and physical networks, strategies, and protocols.

Enterprise networking can be categorized into four major dimensions. They are coordination, partner knowledge, relational skills, and integral communication. All of them are considered crucial for the enterprise's development and security. It helps the enterprise to attain superior performance (Berisha-Shaqiri, 2014).

2.3 Risk Management

Risk Management is essential as it enables the project's success rate. The risk management framework is usually based on identifying, assessing, and controlling the threats to secure the enterprise's capital and finance. These risks usually come from different sources such as financial uncertainties, various legal liabilities, specific

technological issues, weak strategic management, natural disasters, and others (Hassel & Cedergren, 2021).

Risk management can be further categorized into three dimensions: including assessment and probability of risks, risk extent and risk impact. Therefore, proper risk management can be conducted by following these two dimensions (Lubna, 2019).

3. LITERATURE REVIEW

3.1 Role of Information Quality on Enterprise Networking in Telecommunication Industry

The quality of information is regarded as a pivotal facilitator of enterprise networking particularly in sectors that have high levels of technological intensity like telecommunications (Dan & Andre, 2014). Enterprise networking depends on the sharing of timely, accurate, relevant, and comprehensive information by the stakeholders which enable the firms to build trust, enhance collaboration and sharing of knowledge across organizational boundaries. Within the telecommunication sector, where competitive advantage is frequently gauged by the capacity to handle high volumes of customer, market and operational data, the quality of information is a key factor in facilitating an effective networking strategy with the suppliers, partners and customers. The lack of information quality, on the contrary, may result in the inefficiency of enterprise networking efforts due to miscommunication, duplication of work, and weakening cooperation. Thus, the quality of information is the key to increasing the ability of telecom companies to create and maintain strong enterprise networks that promote the innovation and commercial responsiveness (Chivandi, Mutanga, & Musungwini, 2014).

3.2 Role of Information Quality on Risk Management in Telecommunication Industry

Risk management in telecommunication industry requires the quality of information availed to decision-makers. Risk management is the process of identifying, evaluating, and reducing possible risks to business functions, security and service delivery. Quality information, in turn, has the following qualities: it must be accurate, relevant, complete, and timely; high-quality information gives managers the insights needed to predict

threats, allocate resources, and develop proactive risks reduction strategies (McKinney et al., 2019). In the case of telecom companies, the risks can be caused by the breakdown of the network, hackers or cyberattacks, changes in regulation or a market interruption and all of them demand trustworthy data to handle the situation (Shamala, Ahmad, Zolait, & Sedek, 2017). Empirical experiments have reported that low levels of information quality result in slower responses, incorrect perception of risk severity, and greater susceptibility to crises, whereas quality information is associated with improved forecasting and resilience of organizations (Wang and Strong, 1996). Therefore, within the telecommunication framework, information quality can be considered a key requirement to create resilient risk management frameworks that can ensure business continuity and customer confidence in a highly dynamic world (Choi, Ye, Zhao, & Luo, 2016).

3.3 Role of Risk Management on Enterprise Networking in Telecommunication Industry

Risk management is also a key enterprise networking facilitator as organizations are becoming more aware that teamwork and cross-organizational working relationships are key in handling multifaceted risks (Troia, Zorello, Maralit, & Maier, 2020).. In telecommunication sector where technological, operational and security risks are a common problem, good practices in risk management have led to firms establishing robust enterprise networks to share their resources, pool their expertise and come up with solutions that are mutually beneficial. According to the research conducted in the past, organizations that have well-designed risk management systems are in a better position to engage in enterprise networking due to their ability to minimize uncertainties and develop trust with partners (Bisdikian, Kaplan, & Srivastava, 2013). In addition, risk management promotes open communication, increases compliance, and allows the mutual risk-sharing arrangements, which reinforces network relationships between telecommunication companies, regulators, and technology suppliers. The proactive approach to risks management helps organizations feel more comfortable with setting up and maintaining enterprise networks that can lead to innovation and competitive advantage. Risk management is, therefore, not only a protective process, but a strategic facilitator of efficient

networking in the telecommunication market (Chivandi, Mutanga, & Musungwini, 2018).

3.4 Role of Information Quality on Enterprise Networking with the mediating impact of Risk Management in Telecommunication Industry

The mediating influence of risk management offers a unified outlook regarding the effect of information quality in terms of its impact on enterprise networking within the telecommunication sector. Although the quality of information plays a direct role in facilitating cross-enterprise network collaboration and connectivity, the effects it produces are multiplied further when the practices of risk management are integrated into the organizational processes. Quality information is used to establish the baseline of effective risk identification, assessment and mitigation, which in turn enhances organizational capacity to be involved in collaborative partnerships and enterprise networks. Previous research notes that risk management mediates the interrelation between information resources and organizational results through the transformation of raw information into viable strategies that diminish uncertainty and build trust among stakeholders (Alvizu, Maier, Troia, & Pattavina, 2017). In telecommunications where companies have to work in high risk environments including cyber threats, regulatory forces and technological shocks, risk management serves as an interface that can convert advantages of information quality into sustainable networking benefits. The given mediation view stresses that the complete potential of information quality on the enterprise networking can be fulfilled only when associated with the proper risk management practices that can increase organizational resilience and support long-term strategic cooperation (NAZOR H. , 2020).

3.5 Problem Statement and Research Gap

The research and literature review have already depicted that the information quality is presented to understand the data quality problems and classify them in the telecommunication industry. Improved data quality leads to better decision-making across an organization. Vital and quality information builds networks and develops business. Having an effective and informative Risk Management decreases the chances of information-related security incidents. It helps the telecommunication industry understand the risks

and implement strategies to avoid potential breaches.

This research is significant as it helps develop the telecommunication domain and helps the industry have a strong networking enterprise and risk management (Xing & Yan, 2019).

There are identified significant research gaps and limitations in previous researches which are mentioned below:

- (i) Lack of consistent information.
- (ii) Deficiency of core database.
- (iii) Lack of resources to find errors.
- (iv) Absence of standardization
- (v) Scarcity of synchronization

The current research aims to mitigate these gaps and the problem statements helps the researcher to formulate the following research objectives:

- (i) Finding the statistical impact of information quality on the telecommunication industry.
- (ii) Finding out why risk management is essential for the telecommunication industry.
- (i) Finding the influence of enterprise networking with the mediating role of risk management in the telecommunication industry.

3.6 Research Model

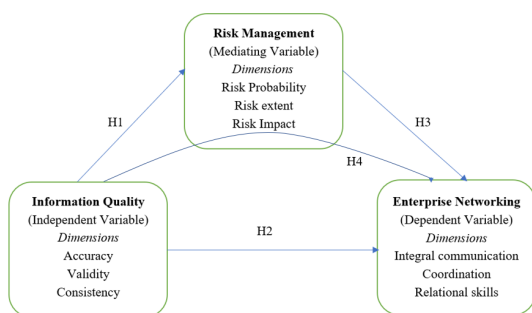


Figure 1: Research Model

3.7 Research Hypotheses

H0: Information Quality has no statistical impact on Enterprise Networking at Telecommunication Industry

H1: Information Quality has no statistical impact on Risk Management at Telecommunication Industry

H2: Risk Management has no statistical impact on Enterprise Networking at Telecommunication

Industry

H3: Information Quality has no statistical impact on Enterprise Networking with the mediating role of Risk Management at Telecommunication Industry.

4. METHODOLOGY

The study is conducted in a descriptive manner of research design (Asenahabi, 2019). A descriptive study design seeks data to objectively characterize a phenomena, situation, or community. It specifically assists in answering the what, where, when, as well as how questions about the research challenge, instead of the why. Previous researches have been taken into consideration for the secondary data analysis. Due to the shortage of time as well as the Covid19 outbreak situation, the survey is done on the digital platform (Puy, Tremblay, Gribonval, & Vandergheynst, 2018). Every respondent is sent a consent mail of the survey questionnaire (Taherdoost, 2019). According to their recorded responses, quantitative analysis involving correlation-regression method done for further data interpretation (Shrestha & Basnet, 2018). Quantitative research is concerned with collecting numerical data in order to analyze statistically (Sadh & Kumar, 2019).

4.1. Population and Sample and Unit of Analysis

The quantitative data collected using an online survey method, as it is efficient, cost effective, and less time-consuming method to collect data. For the online survey, 150 participants selected through simple random sampling method. It supported the research to select participants for the study without any bias (GillesPuy, Tremblay, Gribonval, & Vandergheynst, 2018). It is vital for the research as it is a fundamental method of inquiry. Furthermore, the reason behind selecting this particular sample size can be mentioned as it seems to be a standard number of respondents and based on their feedback, a strong conclusion can be developed at the end of the research. The sample population for the current research includes employees associated in various organizations of the telecommunication sectors across. The rationale behind selecting this population is they could provide better insights about the impact of information quality on enterprise networking (Zhang, 2020).

5. DATA ANALYSIS

This study includes one dependent variable, Enterprise networking, and the independent variable is information quality. From the literature review analysis, it has been discovered that the impact of information quality on enterprise networking is moderate due to risk management. Hence, risk management plays the role of a mediation variable. In this report sector, discuss the demographic data frequency distribution. This shows how responders of our sample belong to different categories. Descriptive statistics, correlation analysis, and regression analysis done using the IBM SPSS software.

Table 1: Demographical Statistics

Age	Frequency	Percent
Less than 22 years	54	36.0
Between 22 – 35 years	38	25.3
35 – 47 years	33	22.0
More than 47 years	25	16.7
Total	150	100.0
Gender		
Female	69	46.0
Male	81	54.0
Total	150	100.0
Education Level		
High school or Diploma	26	17.3
Undergraduate	42	28.0
Graduate	52	34.7
Post Graduate	30	20.0
Total	150	100.0
Work Experience		
Less than 5 years	21	14.0
5 – 10 years	42	28.0
11- 20 years	56	37.3
More than 20 years	31	20.7
Total	150	100.0

The data used in this study is highly dispersed as it includes the respondents belonging to different ages, gender, level of education, and work experiences. The age variable consists of four categories. 54 responders fall within the age group of fewer than 22 years. 38 responders fall within the range of age between 22 to 35 years. 33 responders have the age within the limit of 35 to 47

years. While the rest of the responders that are 25 falls within the age group of more than 47 years. The responders are also divided into two gender categories, male and female. The male responders are 81, while the female responders are 69. The sample has more male members than the female. The education level is also divided into four categories. The sample has 26 responders with a high school or diploma degree. The 42 responders are undergraduates. 52 of the responders graduated, while the rest of 30 hold the degree of postgraduates. Similarly, the work experience is also divided into four categories. 21 responders have an experience level of fewer than 5 years. 42 responders' experience level is 5 to 10 years. 56 responders' experience level falls between 11 to 20 years. Lastly, the 31 responders have an experience level of more than 20 years.

Table 2: Reliability & Validity Measurement:

Variables	Cronbach's Alpha
Information Quality	.609
Risk Management	.735
Enterprise Networking	.772

The reliability test has been conducted to test whether study variables provide reliable information. To conclude that the data is highly reliable, the Cronbach's Alpha value is used, which is needed to be greater than 60%. The value of all three variables included in our model is greater than the criteria hence, it proved that the data would provide us the reliable information.

Table 3: Descriptive Statistics of the constructs:

Descriptive Statistics		
	Mean	Std. Deviation
Information Quality	2.4943	.72232
Risk Management	2.4867	.81824
Enterprise Networking	2.5007	.81434

The mean value of the information quality is 2.5, with a standard deviation of 0.72. The mean value of the risk management is 2.48, with a standard deviation of 0.82. The mean value of enterprise networking is 2.5, with a standard deviation of 0.82. The difference between the mean and standard values of all three variables is huge. This

is an indication that the data of the study is highly dispersed.

The frequency distribution of the constructs has been summarized below tables:

Table 4: Information Quality

Items Description	Strong Disagree	Disagree	Neutral	Agree	Strongly Agree
Our management implements different information systems	95	24	17	9	5
I think converting data into useful information is the most important function the information system provides to a business organization	29	15	29	43	34
I think data information is vital in generating value and a competitive edge for the business?	64	36	21	17	12
I think data quality is important in generating value for the business?	38	30	37	34	11
I think data validity is an important attribute in enhancing the data quality and business value?	51	33	26	23	17
I think that data consistency is an important attribute in enhancing the data quality and business value?	47	36	27	29	11
I think data consistency is important in enhancing the data quality and business value?	43	28	29	30	20

Most responders disagreed that their management uses different information systems in their organization. According to most responders, an important function of the information system is to convert data into useful information. It has been disagreed by the majority of responders that information does generate any value or provide a competitive advantage to the business. Some responders agreed while some showed neutral responses that data quality increases the

business's value. The majority of responders disagreed that the validity of the data is useful for the value of the business or it increases the value of the business. Most of the responders also disagreed that it is not true that consistency is important to increase the quality of the data along with the value of the business. They also disagreed that data consistency is an important attribute of data quality.

Table 5: Risk Management

Items Description	Strong Disagree	Disagree	Neutral	Agree	Strongly Agree
I think the quality of information plays a vital role in managing the risks in the business networking system?	61	40	23	16	10
I agree that quality data information enhances the possibility of identifying potential vulnerabilities in the business network?	41	35	29	33	12
I agree with the fact that quality data information enhances the scope of network failure in the context of a business organization?	36	39	29	36	10

I agree with the fact that quality data information reduces the scope of cyber attacks within the network of an organization?	51	28	25	34	12
I agree that quality data information reduces the probability of occurrence risks and error within the organizational networking system?	45	36	23	38	8
I think the fact that quality data information reduces the impact of risks and error in the organizational networking system?	47	37	30	22	14
I agree that quality data information minimizes the scale of risks and errors that can affect the organizational networking system?	51	33	17	36	13

The majority of the responders disagreed that there is any role of quality management in managing the risk. Most responders also disagreed that quality data information makes it easier to spot security holes in a company's computer network. They also disagreed that in business, a lack of quality data information increases the extent of network failure. Most responders agreed

that high-quality information lessens the potential impact of a cyberattack on an organization's network. The majority of responders disagreed that using high-quality information decreases the likelihood of mistakes and dangers in the company's network system. Most responders said that it is not true that the information quality reduces the influence and scale of error and risk.

Table 6: Enterprise Networking:

Items Description	Strong Disagree	Disagree	Neutral	Agree	Strongly Agree
I agree that proper networking is important for ensuring entrepreneurial success?	64	36	21	12	17
I agree that business networking helps maintain a balanced relationship between the business's internal and external partners of the business?	46	37	23	31	13
I think that business networking is an integral part of communication building?	40	36	24	35	15
I think that business networking is required for maintaining a coordinative working environment?	56	32	24	23	15
I think business networking is required to maintain and acquire relational skills continuously?	45	29	29	31	16
I think that proper business networking requires the support of quality information?	49	36	26	23	16
I think that proper business networking requires support from a strong risk management	48	30	22	34	16
I agree that business networking has an impact on company revenue?	42	39	33	19	17

I agree that enterprise networking can enhance brand efficiency?	51	32	26	25	16
--	----	----	----	----	----

The respondents believe proper networking is unnecessary for the enterprise's success. They also disagreed that a business network helps maintain the balance link between the external and internal partners of the business. They disagreed that business networking is an integral part of the business. They do not believe that business networking does maintain a coordinative working environment. They also said that maintaining and developing one's interpersonal skills is not essential to business networking. They said that business networking does not require support for the quality of information and strong risk management. They also disagreed that the business network does not impact the company's revenue and the brand's efficiency.

Correlation Analysis:

Correlation is a bivariate study that analyses the degree and direction of the link between two variables. Correlation coefficient values range from +1 to -1 to determine the link's validity. There is no association between the independent variables if the correlation coefficient is less than one. The association between the two variables weakens as the value of the correlation coefficient approaches zero. An arrow pointing up shows a connection going in the right direction, whereas the coefficient value indicates the opposite.

Table 7: Correlation Analysis

Correlations			
	Information Quality	Risk Management	Enterprise Networking
Information Quality	1	.699**	.591**
Risk Management	.699**	1	.723**
Enterprise Networking	.591**	.723**	1

5.1. Information Quality and Risk Management

According to the above values, information quality and risk management are almost strongly linked, as their correlation value is 69.9%. The direction of the link between two variables is also found to be

positive, which indicates that an increase in information quality will also help in more risk management.

5.2. Information Quality and Enterprise Networking

According to the above values, information quality and enterprise networking are moderately linked to each other as their correlation value is 59.1%. The direction of the link between two variables is also found to be positive, which indicates that increase in information help in better enterprise networking.

5.3. Risk Management and Enterprise Networking

According to the above values, information quality and enterprise networking are also strongly linked, as their correlation value is 72.3%. The direction of the link between the two variables is also found to be positive, which indicates that an increase in risk management also help in much better enterprise networking.

5.4. Regression Analysis

The regression analysis carried out to investigate the following hypothesis of the study:

Null Hypothesis: Information Quality has no statistical impact on Enterprise Networking in Telecommunication Industry

Alternative Hypothesis: Information Quality has a statistical impact on Enterprise Networking in Telecommunication Industry

Null Hypothesis: Information Quality has no statistical impact on Risk Management in Telecommunication Industry

Alternative Hypothesis: Information Quality has a statistical impact on Risk Management in Telecommunication Industry

Null Hypothesis: Risk Management has no statistical impact on Enterprise Networking in Telecommunication Industry

Alternative Hypothesis: Risk Management has a statistical impact on Enterprise Networking in Telecommunication Industry

Null Hypothesis: Information Quality has no statistical impact on Enterprise Networking with the mediating role of Risk Management in the Telecommunication Industry

Alternative Hypothesis: Information Quality has a statistical impact on Enterprise Networking with the mediating role of Risk Management in the

Telecommunication Industry

The below table summarizes the results of the first three hypotheses:

Table 8: Hypothesis Testing

Construct	Enterprise Networking		Risk Management
	M1	M2	M3
Information Quality	0.666* **		0.792***
Risk Management		0.720 **	
Enterprise Networking			
R-square	0.349	0.523	0.489
F value	79.501	162.0 76	141.523
Sig.	0.000	0.000	0.000

The p-value of the first hypothesis (M1) is found to be lesser than the 0.05 significant value. A p-value of less than 0.05 provides evidence to reject the null hypothesis and accept the alternative

Table 9: Multiple Regression

IV	MV	DV	Effect of IV on M (a)	Effect of M on DV (b)	Indirect Effect (a*b)	Total Effect (c)	Total Effect (c)	95% CI	Supported
Information Quality	Risk Management	Enterprise Networking	0.792	0.602	0.4775	0.6664		[0.3395, 0.6291]	Yes

According to the above model, the mediation impact of Risk Management is supported. The impact of risk management mediates the relationship between information quality and risk management.

6. DISCUSSION

After the literature review analysis, it has been discovered that the relationship between information quality and enterprise networking does exist. The information quality positively influences enterprise networking. The results are in line with the findings of (Chivandi, Mutanga, and Musungwini (2014), who stated that the concept of Quality of Service (QoS) has emerged as a solution to the increasing demand for network capacity as the quality of information has a positive influence on the enterprise networks. QoS appears to be a set

hypothesis. The alternative hypothesis states that information quality influences enterprise networking significantly at a significance level of 5%. There is a 66% variation in the enterprise networking by a 1% increase in the information quality. The p-value of the second hypothesis (M3) is also found to be lesser than the 0.05 significant value. The p-value of less than 0.05 provides evidence to reject the second null hypothesis and accept the second alternative hypothesis. The alternative hypothesis states that information quality influences risk management significantly at a significance level of 5%. There is a 79.2% variation in risk management by a 1% increase in the information quality. The third hypothesis (M2) p-value is also less than the 5% significance value. The p-value of less than 0.05 provides evidence to reject the third null hypothesis and accept the third alternative hypothesis. There is a 72.0% variation in enterprise networking by a 1% increase in risk management. The sig. The value of all three models is 0.000, indicating that the models are significant.

of communication networks that assure a network's ability to consistently execute high-priority apps and traffic despite restricted network capacity. Also, these findings are confirmed by the (NAZOR H., 2020). According to him, due to a lack of knowledge, the industry have difficulty making decisions. The telecommunications business is better organized as a result of higher-quality data. The more data on corporate networking of the highest quality, the more confident the industry is in its judgments. It also aids the business in warding off any dangers. Our findings also confirmed that information quality also positively influences enterprise networking. These findings align with those (Choi, Ye, Zhao, & Luo, 2016). They said that the problem of poor data integrity, which hurts the ability of businesses to make sound decisions, persists. This

led to an increase in the level of risk of the company. Over time, effective risk management is an essential core capability for companies to produce and build shareholder value for shareholders. This can be achieved by having a good quality of information. Adapting to ever-changing risk assessments demands better data and knowledge in an effective risk management approach.

Secondly, we also examined the impact of risk management on enterprise networking which is also found to be positive. These finds are similar to the findings (Troia, Zorello, Maralit, & Maier, 2020) who stated that risk management minimizes the negative impacts of risks such as infrastructural failures in the Telecom sector, alterations in trust and security for corporate networking, workforce structural threats mitigation failure, disruption of the supply chain, and inadequate management and networking.

Thirdly, regression analysis results have also confirmed that risk management has a mediating role in the relationship between information quality and enterprise networking. The finding (Alvizu, Maier, Troia, & Pattavina, 2017) explains that information quality on corporate networking is essential for an effective risk management system since threats, difficulties, and dangers in the communications sector may all be identified through it. So that the telecom sector may negotiate business more effectively and more flexibly without any possible dangers, the risk management system has been created in an intermediary fashion. This mechanism further improves the enterprise networking or the organization.

7. CONCLUSION

The results of this study draw the conclusion that information quality is an important factor influencing enterprise networking and that the provision of quality information in terms of accuracy, reliability and timeliness is important in enhancing organizational connectivity and collaboration. Information helps to strengthen the communication flow, to help decision-making, and to establish trust among networked enterprises which improves the overall performance and resilience. Furthermore, the role of risk management as mediation is shown, which makes information quality accessible for its

implementation in actionable strategies to reduce uncertainties and to preserve organizational interests and the stability of enterprise networks. Practically, the findings suggest that organizations need to invest in information management systems and embed strong risk management systems in order to maximize the benefits of enterprise networking. For future research, researchers can extend this framework by investigating other mediators such as organizational agility or technological innovation and replicating the model on other industries and across different cultures to increase generalizability.

REFERENCES

- Al-Mamary, Y. H., Shamsuddin, A., & Aziati, N. (2014). The relationship between system quality, information quality, and organizational performance. . *International Journal of Knowledge and Research in Management & E-Commerce*, 4(3), 7-10., https://www.researchgate.net/profile/Yaser-Hasan-Salem-Al-Mamary-d-yasr-hsn-almmary/publication/269463861_The_Relationship_between_System_Quality_Information_Quality_and_Organizational_Performance/links/5530f5380cf27acb0de8b002/The-Relationship-between-Sys.
- Alvizu, R., Maier, G., Troia, S., & Pattavina, A. (2017). SDN-based network orchestration for new dynamic Enterprise Networking services. In 2017 19th International Conference on Transparent Optical Networks (ICTON) (pp. 1-4). IEEE., <https://ieeexplore.ieee.org/abstract/document/8025147>.
- Asenahabi, B. M. (2019). Basics of research design: A guide to selecting appropriate research design. . *International Journal of Contemporary Applied Researches*, 6(5), 76-89., <http://ijcar.net/assets/pdf/Vol6-No5-May2019/07.-Basics-of-Research-Design-A-Guide-to-selecting-appropriate-research-design.pdf>.
- Beqiri, E. (2018). The implications of information networking at the pace of business development. *International Journal of Knowledge*, 27, 17-22., https://www.researchgate.net/profile/Edmond-Beqiri/publication/330972038_THE_IMPLICATIONS_OF_INFORMATION_NETWORKING_AT_THE_PACE_OF_BUSINESS_DEVELOPMENT/links/5c5e12eca6fdccb608b27b6e/THE-IMPLICATIONS-OF-INFORMATION-NETWORKING-AT-THE-PACE-OF-BUSINESS-DEVEL.
- Berisha-Shaqiri, A. (2014). Impact of information technology and internet in businesses. . *Information technology*, Q2., <https://d1wqtxts1xzle7.cloudfront.net/55182080/Ajbs-73-79-with-cover-page-v2.pdf?Expires=1655476082&Signature=AKUlm2ctEQjby8mqgF27aZYxzrjqc-wtyAzj3yTrAKUu3~SOsxxk6-BYKt6AyEPUSF7MEanBy98izJqVpFR-OxRn1DcoS7j9aSfnea7oQkuFpz->

- pTAo12U9DU1pfi4OuCX7o0R5BdEgHdMis.
- Bisdikian, C., Kaplan, L. M., & Srivastava, M. B. (2013). On the quality and value of information in sensor networks. . *ACM Transactions on Sensor Networks (TOSN)*, 9(4), 1-26., <https://dl.acm.org/doi/abs/10.1145/2489253.2489265>.
- Chivandi, A., Mutanga, K. P., & Musungwini, S. (2014). The effects of the relationship between business strategies and information technology strategies: the telecommunication sector of Zimbabwe. . *IOSR Journal of Business and Management*, 16(10), 56-71., https://d1wqtxts1xzle7.cloudfront.net/35151158/H0161015671-libre.pdf?1413431132=&response-content-disposition=inline%3B+filename%3DThe_effects_of_the_relationship_between.pdf&Expires=1655469218&Signature=hOUyDKovXwt4qf4-87XrqlOodioL65mQKjsF657L~c0YvvnwvUZ.
- Chivandi, A., Mutanga, K. P., & Musungwini, S. (2018). The effects of the relationship between business strategies and information technology strategies: the telecommunication sector of Zimbabwe. *IOSR Journal of Business and Management*, 16(10), 56-71., <https://d1wqtxts1xzle7.cloudfront.net/35151158/H0161015671-with-cover-page-v2.pdf?Expires=1655474664&Signature=DCM3nDY1RHhAhKEF06~U9CQ-BARUU8GEiUq8kUWP6Skc-1p3woA398evwJ0auz2uYrvJuFAkqDsH0DQiXIS~X1PIGECuKZXBt2yCT7Y4XtOYBoWct106VnKRRQB19JuKN9z4oW50qxqp83Xs>.
- Choi, Y., Ye, X., Zhao, L., & Luo, A. C. (2016). Optimizing enterprise risk management: a literature review and critical analysis of the work of Wu and Olson. *Annals of Operations Research*, 237(1), 281-300., <https://link.springer.com/article/10.1007/s10479-015-1789-5>.
- Dan, B., & Andre, K. (2014). The Enterprise Network Enables. [https://www.hughes.com/sites/hughes.com/files/2017-04/The_Enterprise_Network_Enables_Business_Innovation\(1\).pdf](https://www.hughes.com/sites/hughes.com/files/2017-04/The_Enterprise_Network_Enables_Business_Innovation(1).pdf).
- GillesPuy, Tremblay, N., Gribonval, R., & Vandergheynst, P. (2018). Random sampling of bandlimited signals on graphs. *Applied and Computational Harmonic Analysis*; Volume 44, Issue 2, Pages 446-475.
- Hassel, H., & Cedergren, A. (2021). Integrating risk assessment and business impact assessment in the public crisis management sector. *International Journal of Disaster Risk Reduction*, 56, 102136., <https://www.sciencedirect.com/science/article/pii/S221420921001023>.
- Lubna, A. (2019). SECURITY IN CLOUD COMPUTING: A. *International Journal of Computer Science and Information Security (IJCSIS)*.
- Luo, B. (2022). A Method for Enterprise Network Innovation Performance Management Based on Deep Learning and Internet of Things. . *Mathematical Problems in Engineering*, 2022., <https://www.hindawi.com/journals/mpe/2022/8277426/>.
- Munasinghe, H., Premasiri, H. R., & Kumara, B. (2015). MODELING WATER QUALITY CHANGES OF URBAN CANALS IN COLOMBO CITY AGAINST RAINFALL AND LAND USE PATTERNS. In *International conference in Information Science (ICIS)*., <https://www.researchgate.net/profile/Buddhin-Kumara/amp>.
- NAZOR, H. (2020). INFORMATION QUALITY MANAGEMENT AND ORGANIZATIONAL PERFORMANCE OF TELECOMMUNICATION INDUSTRY IN RIVERS STATE, NIGERIA. *IIARD International Journal of Economics and Business Management E-ISSN 2489-0065 P-ISSN 2695-1878*., <https://www.iiardjournals.org/get/IJEBM/VOL.%206%20NO.%201%202019/INFORMATION%20QUALITY%20MANAGEMENT.pdf>.
- Puy, G., Tremblay, N., Gribonval, R., & Vandergheynst, P. (2018). Random sampling of bandlimited signals on graphs. *Applied and Computational Harmonic Analysis*, 44(2), 446-475., <https://www.sciencedirect.com/science/article/pii/S1063520316300215>.
- Sadh, R., & Kumar, R. (2019). Directional Pattern based Clustering for Quantitative Survey Data: Method and Application. . *Survey Research Methods (Vol. 15, No. 2, pp. 169-185)*., <https://ojs.ub.uni-konstanz.de/srm/article/view/7773>.
- Saeidi, P., Saeidi, S. P., Sofian, S., Saeidi, S. P., Nilashi, M., & Mardani, A. (2019). The impact of enterprise risk management on competitive advantage by moderating role of information technology. . *Computer standards & interfaces*, 63, 67-82., <https://www.sciencedirect.com/science/article/abs/pii/S0920548918301454>.
- Shamala, P., Ahmad, R., Zolait, A., & Sedek, M. (2017). Integrating information quality dimensions into information security risk management (ISRM). . *Journal of Information Security and Applications*, 36, 1-10., <https://www.sciencedirect.com/science/article/abs/pii/S2214212617300972>.
- Shrestha, A. K., & Basnet, N. (2018). The correlation and regression analysis of physicochemical parameters of river water for the evaluation of percentage contribution to electrical conductivity. . *Journal of Chemistry*, 2018., <https://www.hindawi.com/journals/jchem/2018/8369613/>.
- Taherdoost, H. (2019). . What is the best response scale for survey and questionnaire design; review of different lengths of rating scale/attitude scale/Likert scale. *Hamed Taherdoost*, 1-10., https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3588604.
- Troia, S., Zorello, L. M., Maralit, A. J., & Maier, G. (2020). SD-WAN: an open-source implementation for enterprise networking services. In *2020 22nd International Conference on Transparent Optical Networks (ICTON)* (pp. 1-4). IEEE., <https://ieeexplore.ieee.org/abstract/document/9203058>.
- Xing, X., & Yan, S. (2019). Accounting information quality and systematic risk. . *Review of Quantitative Finance and Accounting*, 52(1), 85-103.,

<https://link.springer.com/article/10.1007/s11156-018-0703-z>.

- Zhang, Z. (2020). Enterprise Networking with Secure Access Service Edge. AFIN 2020 : The Twelfth International Conference on Advances in Future Internet, http://personales.upv.es/thinkmind/dl/conferences/afin/afin_2020/afin_2020_1_10_40002.pdf.
- Alvizu, R., Maier, G., Troia, S., & Pattavina, A. (2017). SDN-based network orchestration for new dynamic Enterprise Networking services. In 2017 19th International Conference on Transparent Optical Networks (ICTON) (pp. 1-4). IEEE., <https://ieeexplore.ieee.org/abstract/document/8025147>.
- Chivandi, A., Mutanga, K. P., & Musungwini, S. (2014). The effects of the relationship between business and information technology strategies: the telecommunication sector of Zimbabwe. . IOSR Journal of Business and Management, 16(10), 56-71., https://d1wqtxts1xzle7.cloudfront.net/35151158/HO161015671-libre.pdf?1413431132=&response-content-disposition=inline%3B+filename%3DThe_effects_of_the_relationship_between.pdf&Expires=1655469218&Signature=hOUyDKovXwt4qf4-87XrqIOdioOL65mQKJsF657L~c0YvvonwUZ.
- Choi, Y., Ye, X., Zhao, L., & Luo, A. C. (2016). Optimizing enterprise risk management: a literature review and critical analysis of the work of Wu and Olson. *Annals of Operations Research*, 237(1), 281-300., <https://link.springer.com/article/10.1007/s10479-015-1789-5>.
- NAZOR, H. (2020). INFORMATION QUALITY MANAGEMENT AND ORGANIZATIONAL PERFORMANCE OF TELECOMMUNICATION INDUSTRY IN RIVERS STATE, NIGERIA. *IIARD International Journal of Economics and Business Management* E-ISSN 2489-0065 P-ISSN 2695-1878, <https://www.iiardjournals.org/get/IJEBM/VOL.%206%20NO.%201%202019/INFORMATION%20QUALITY%20MANAGEMENT.pdf>.
- Troia, S., Zorello, L. M., Maralit, A. J., & Maier, G. (2020). SD-WAN: An open-source implementation for enterprise networking services. 2020 22nd International Conference on Transparent Optical Networks (ICTON) (pp. 1-4). IEEE., <https://ieeexplore.ieee.org/abstract/document/9203058>.