

TOWARDS A MODEL OF INFORMATION QUALITY DIMENSIONS IN ISLAMIC BANKING INDUSTRY IN MALAYSIA

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Abstract: *Poor information quality could lead to ambiguity and has a significant impact on the performance of an organization, generally. The growth of the Islamic banking industry has produced a large increase in the volume of financing, producing a large increase in the volume of financing. These situations, however, have not exhibited a corresponding return in terms of the quality of financial products and services information produced, especially related to product disclosure sheet. The aim of the present study is to propose information quality model for Islamic banking industry. Content analysis technique by reviewing past literature was conducted and descriptive statistic of frequency analysis was undertaken to conclude the final information quality dimensions for a model of information quality. The results revealed that five dimensions composed the model of information quality which are Accuracy, Relevance, Timeliness, Accessibility, and Understandability. The results will guide future research and provide guidance for educators and Islamic banking practitioners seeking to enlighten users of the use and advantage of product disclosure sheet provided.*

Keywords: *Information quality dimension, Information quality model, Islamic bank*

Introduction

A sound decision can be achieved by obtaining a lot of information as it the success factor in decision making process. This is due to the customers need to obtain many types of information and select that significant information to make decisions. Well-informed consumers are those who have more information about the consequences of their decisions than others, and those who are concerned about the cost of information and do recognize the benefits gained from the information (Ni, & Khazanchi, 2009).

Effective operational activities and decision making is depending on information and it is essential, information technology become an important component as a tool to disseminate information from an organization as well as for customers to obtain information (Muda, Asrina

Waty, Roesli, & Nuradi, 2020). It is evidenced by Buhalis and Law (2008) that information technology is a major tool for providing information due to its abilities to store, process data and distribute information.

However, although information system helps institutions and customers to access to historical and present information needed for decision making, it tends to lead to poor quality of information if the information systems did not update regularly (Power, 2008). Similar situation occurred in banking and finance industry whereby the consumers responded that difficult-to-read financial information provided resulted as a poor quality of information and affected their decision when acquiring the financial products and services (Butler, & Butler, 2018; Majid, Hussain, Ahmad, & Ali, 2015). Furthermore, poor information quality has a significant impact on the general performance of an organization as discussed by Lima, Maçada, and Koufteros (2007).

With variety of products introduced to the consumers, a quality of product information is significant to be disseminate to the consumer to facilitate them to make financial decision (Bank Negara Malaysia, 2014). Past studies has been discussed the various dimensions of information quality as the determinants for information to be justified as a quality information in various fields of study (Wang, & Strong, 1996; Juran, 1988; Tayi, & Ballou, 1998; Kahn, Strong, & Wang, 2002; Laumer, Maier, & Weitzel, 2017; Muda, & Erlina, 2019). However, current study on information quality dimensions in banking studies especially in Islamic banking studies remain sparse (Muda et al., 2020; Butler et al., 2018; Lima, Maçada, & Koufteros, 2007; Slone, 2006; Najjar, 2002; Nino, 2001; Grievess, 1998).

Hence, this study presents the review of literature on information quality attributes in banking studies and proposed the list of information quality dimensions which frequently used that could be considered as important dimensions of information quality to be possess by banking and Islamic banking product information such as product disclosure sheet for the usage of banks' customers when acquiring financial products and services.

Literature Review

Majid et al. (2015) conducted a study on the availability of PDS on Islamic banks' website, however, findings on the information quality dimensions remain sparse. Meanwhile, Bank Negara Malaysia (2014), investigated the practice of Product Disclosure Sheet (PDS) in financial decision process. The result revealed that the PDS was not user friendly caused by the format used was lengthy, language was difficult to understand and difficult to compare the products offered by the banks. In addition, the consumers also not aware about the existence and purpose of PDS to be used to make decision. Only half of the respondents recalled seeing the PDS. The study also indicated that, among the dimensions of information quality are readability, comparability, format, and availability.

Muda et al. (2020) examined the impact of information quality on accounting information system of user satisfaction on local government bank at Indonesia. The result found that information quality has a significant effect on accounting information system of user satisfaction. The study used reliability, understandability, timeliness, accuracy, relevance, authenticity, and comprehensibility as the main dimensions for information quality.

While, Butler and Butler (2018) summarised information quality dimensions adapted from Knight and Burn (2005) as available, accessible, current, clear, and purposeful of information

in examining the information quality used in phishing-related content on South African financial institutions' website. The result showed that the financial institutions displayed deficiencies in all dimensions of information quality for phishing information except for availability of phishing-related information on websites.

Lima, Maçada, and Koufteros (2007) conducted a study on a model for information quality in the banking industry, the case of the Public Banks in Brazil to validate a specific information quality model for the banking Industry. Analyzing using factor analysis using structural equation modelling, Lima et al. (2007) revealed the final model factor of information quality which is accessibility, contextuality, believability and comprehensiveness.

Slone (2006) examined the relationship between quality improvement and organizational outcomes, was adopted Wang and Strong (1996) model of information quality dimension using accessibility, accuracy, appropriateness, believability, completeness, consistency, ease of manipulation, objectivity, relevance, representation, reputation, understandability, value-added, reliability and amount of information. They found that there was a positive relationship between information quality and organizational outcomes. Furthermore, the amount of information did not moderate those relationship.

Similarly, Najjar (2002) also adopted Wang and Strong (1996) model of information quality dimensions to determine the impact of information quality on banking service quality. The dimensions are accessibility, accuracy, appropriateness, believability, completeness, consistency, ease of manipulation, objectivity, relevance, representation, reputation, security, timeliness, understandability, and reliability. The result indicated that all information quality dimensions except accessibility were significantly difference between banks. In addition, accuracy and amount of information were related to overall service quality.

Meanwhile, Nino (2001) was adopted accuracy, relevance, and timeliness as the information quality dimensions in the study of information system usage in the banking sector in Jordan. The result revealed that information quality can improve the efficiency in overall banking process.

Grieves (1998) used source, value-added, and availability of information to examined information quality used in four different sectors namely banking, government, insurance, and pharmaceutical sector. The results indicated a quality information led to better informed decision making across all four sectors.

Abovementioned past studies reviewed revealed that most of the studies conducted study relating to banking generally since only two out of nine past literature conducted a study related to Islamic banking. In addition, out of two, one study was industry practitioner paper which publish by Bank Negara Malaysia. The other one (Majid et al., 2015) did not mentioned about information quality dimensions in their study. Thus, to date, the study regarding information quality dimensions on Islamic banking in Malaysia especially on product information related to product disclosure sheet remain sparse.

Methodology

This paper conducted a content analysis by reviewing on past studies related to information quality dimensions in the Islamic banking industry to achieve the objective of the study to identify the most dimensions of information quality used and become a model which to be proposed for use in Islamic banking and finance practices for preparing and presenting the product and services information especially the product disclosure sheet. Descriptive statistic of frequency was undertaken by using means to provide the final information quality dimensions.

Findings and Discussion

Previous studies that associated to this study were reviewed and lack of study on dimensions of information quality was found. Various dimensions of information quality discussed in the past literature in banking sector were reviewed and presented in Table 1. This table is intended to highlight the information quality dimensions identified by the researchers which is adopted by the past researchers in their studies.

Table 1: Information Quality Dimensions in Banking Studies

Researcher Information Quality Dimensions	Gri ves 1998	Nino 2001	Najjar 2002	Slone 2006	Lima et al. 2007	Butler et al. 2018	Muda et al. 2020	Freq.
Source	/							1
Value-added	/			/				2
Availability	/					/		2
Accuracy		/	/	/			/	4
Relevance		/	/	/		/	/	5
Timeliness		/	/			/	/	4
Accessibility			/	/	/	/		4
Appropriateness			/	/				2
Believability			/		/			2
Completeness			/	/		/		3
Consistency			/	/				2
Ease of Manipulation			/	/				2
Objectivity			/	/				2
Representation			/	/				2
Reputation			/	/				2
Security			/					1
Understandability			/	/		/	/	4
Reliability			/	/			/	3
Amount of Information				/		/		2
Authenticity							/	1
Comprehensibility							/	1
Contextuality					/			1
Comprehensiveness					/			1

To date, based on the past studies reviewed, 23 different information quality dimensions was found from those studies (Muda et al., 2020; Butler et al., 2018; Lima, Maçada, & Koufteros,

2007; Slone, 2006; Najjar, 2002; Nino, 2001; Grieves, 1998). These prior studies were the most related studies on the present studies although it tend to show lack of studies were examined the information quality dimensions in Islamic banking sectors and related to product disclosure sheet of Islamic banks as the important product information attached to the Islamic financial products and services for decision making purpose by consumers (Bank Negara Malaysia 2010, & 2014, Majid et al., 2015).

Table 1 showed the information quality dimensions derived from past literature review conducted in banking sector. The findings indicated that the dimensions of ‘Accuracy’, ‘Relevance’, ‘Timeliness’, ‘Accessibility’ and ‘Understandability’ had frequencies above three point five (3.5) which is the mean of seven studies. In other words, these dimensions were used above fifty percent (50%) out of the total number of studies. Therefore, these five (5) dimensions were important information quality dimensions in this study which to be proposed as important information quality characteristic that should be possessed in product information especially in product disclosure sheet of Islamic financial products and services.

Proposed Model of Information Quality for Islamic Banking Industry

The review of the prior studies carried out on the topic made it possible to propose a model information quality construct for future work, portrayed in Figure 1. Things to note in the proposed model, is the customization of the information quality construct for use in the specific industry to be studied in future.

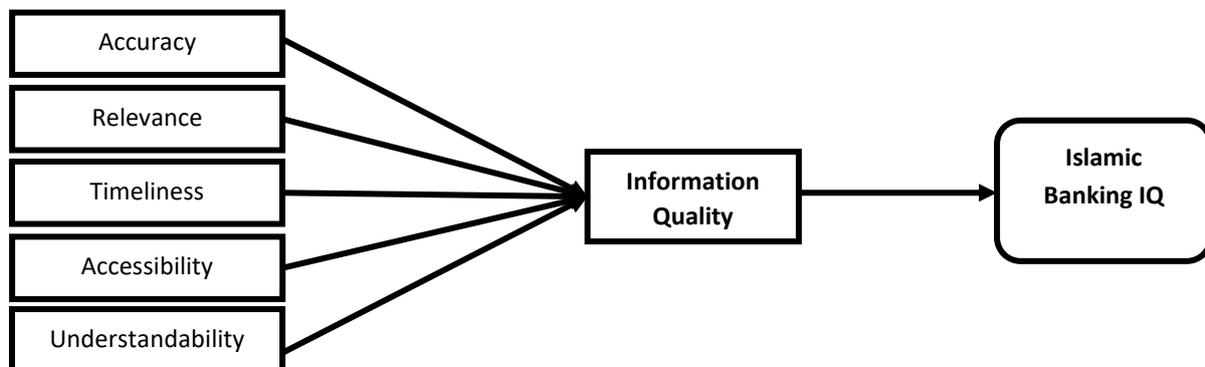


Figure 1: Model of Information Quality for Islamic Banking Industry

Limitations and Future Research

The present study has a few limitations. Firstly, the study was conducted by reviewing past literature limited to banking sector. Secondly, lack of past study found and reviewed related to information quality in banking and Islamic banking studies. Thirdly, only descriptive analysis of frequencies was employed to determine the final model of information quality dimensions.

Thus, future research can, for example, further explore the past literature in another area of studies such as information system and business and marketing studies to compare and conclude a robust finding on final model of information quality to be proposed for banking industry especially Islamic banking industry to mitigate poor and ambiguity (*gharar*) information provided to consumer. In addition, a technique of systematic literature review can be employed for future works for more thorough findings. Moreover, the future research can

further explore the analysis by conducting, for instance, statistical techniques such as exploratory factor analysis and testing the model to further assess the appropriateness of the dimensions for banking industry especially Islamic banking industry which concern about trading without ambiguity (*gharar*) which is prohibited in Islam (Ishak, & Asni, 2020; Iqbal, & Mirakhor, 2007; Khir, Gupta, & Shanmugam, 2008).

Conclusion and recommendations

The present study has presented the results of research that has led to the development of a model of Information Quality (IQ), composed of dimensions significant to the banking industry, specifically the Islamic banking industry. The research model is based on a review of the past literature which adopted information quality in their studies. This model is concluded because it represents all the dimensions found in the literature on IQ in banking industry. The process of finalizing the dimensions of IQ was carried out in accordance with the recommendations found in the literature (Kullada, & Michelle Kurniadjie, 2020; Nam, & Seong, 2020; Zhu, Bernhard, & Gurevyvych, 2009; Lima et al., 2007).

The results revealed that five dimensions composed the model of information quality which are *Accuracy, Relevance, Timeliness, Accessibility* and *Understandability*. The contributions made by this study are the model that, if replicated as to develop the instruments, will aid in identifying the IQ perceived by the banks' executive and consumers. These findings are particularly useful in formulating IQ strategies related to product information that is constantly circulated in the bank and shared with customers.

The results will guide future research and provide guidance for educators and Islamic banking practitioners seeking to enlighten users of the use and advantage of product disclosure sheet provided. From the results revealed, the study recommends to banking especially Islamic banking and finance industry to uphold the dimensions as the characteristic needed for the information to be called as quality information which in line to the function of banks to educate customers to be financially literate by disseminating financial information in addition to selling and providing banking products and services.

References

- Bank Negara Malaysia, (2010). *Guidelines on Product Transparency and Disclosure. Islamic Bankers*. Retrieved 5 May 2015, from <https://islamicbankers.files.wordpress.com/2013/12/20130401-guidelines-on-product-transparency-and-disclosure.pdf>
- Bank Negara Malaysia, (2014). *Financial Stability and Payment Systems Report 2014 | Bank Negara Malaysia | Central Bank of Malaysia*. [online] Available at: <https://www.bnm.gov.my/index.php?ch=en_publication&pg=en_fspr&ac=9&en> [Accessed 1 November 2020].
- Buhalis, D., & Law, R. (2008). Progress in information technology and tourism management: 20 years on and 10 years after the Internet—The state of eTourism research. *Tourism management*, 29(4), 609-623.
- Iqbal, Z. and Mirakhor, A. (2007), *An Introduction to Islamic Finance: Theory and Practice*, Wiley, Singapore.
- Ishak, M. S. I., & Asni, F. (2020). The role of maqasid al-Shari'ah in applying fiqh muamalat into modern Islamic banking in Malaysia. *Journal of Islamic Accounting and Business Research*, 11(9), 2137-2154. <https://doi.org/10.1108/JIABR-12-2019-0224>

- Juran, J. M. (1988). *Juran on planning for quality*. New York: Free Press.
- Kahn, B. K., Strong, D. M., & Wang, R. Y. (2002). Information quality benchmarks: product and service performance. *Communications of the ACM*, 45(4), 184-192.
- Khair, K., Gupta, L. and Shanmugam, B. (2008), *Islamic Banking: A Practical Perspective*, Pearson Longman, Petaling Jaya.
- Knight, S. A., & Burn, J. (2005). Developing a framework for assessing information quality on the World Wide Web. *Informing Science*, 8.
- Kullada, P., & Michelle Kurniadjie, C. R. (2020). Examining the Influence of Digital Information Quality on Tourists' Experience. *Journal of Quality Assurance in Hospitality & Tourism*, 1-27.
- Laumer, S., Maier, C., & Weitzel, T. (2017). Information quality, user satisfaction, and the manifestation of workarounds: a qualitative and quantitative study of enterprise content management system users. *European Journal of Information Systems*, 1-28.
- Lima, L. F. R., Maçada, A. C. G., & Koufteros, X. (2007). A Model for Information Quality in the Banking Industry-The Case of the Public Banks In Brazil. In *ICIQ* (pp. 549-562).
- Majid, M. F. C., Hussain, M. N. M., Ahmad, N. H., & Ali, M. A. (2015). Product Disclosure Sheet of Islamic Bank in Malaysia: Home Financing. *Global Journal Al Thaqafah*, 5(2), 53-62.
- Muda, I., Asrina Waty, H., Roesli, E., & Nuradi, T. E. (2020). The Impact of Accounting Information System on User Satisfaction: Empirical Studies on Local Government Bank. *Journal of Information Technology Management*, 12(1), 94-111.
- Muda, I., & Erlina, A. A. (2019). Influence of human resources to the effect of system quality and information quality on the user satisfaction of accrual-based accounting system. *Contaduría y administración*, 64(2), 10.
- Nam, K., & Seong, N. (2020). A study on influencing factors for customer satisfaction and the continuing use of social network services in financial industry. *Enterprise Information Systems*, 1-25.
- Ni, J., & Khazanchi, D. (2009). Information technology investment decisions under asymmetric information: A modified rational expectation model. *International Journal of Information Technology & Decision Making*, 8(01), 55-72.
- Power, D. J. (2008). Understanding data-driven decision support systems. *Information Systems Management*, 25(2), 149-154.
- Tayi, G. K., & Ballou, D. P. (1998). Examining data quality. *Communications of the ACM*, 41(2), 54-57.
- Wang, R. Y., & Strong, D. M. (1996). Beyond accuracy: What data quality means to data consumers. *Journal of management information systems*, 12(4), 5-33.
- Zhu, Z., Bernhard, D., & Gurevych, I. (2009). *A multi-dimensional model for assessing the quality of answers in social Q&A sites*.