

Validating the Social Content Management Framework: A Delphi Study

(Mengesah Kerangka Pengurusan Kandungan Sosial: Satu Kajian Delphi)

Wan Azlin Zurita Wan Ahmad

Muriati Mukhtar

(Faculty of Information Science and Technology, Universiti Kebangsaan Malaysia)

Yazrina Yahya

(Faculty of Economy and Management, Universiti Kebangsaan Malaysia)

ABSTRACT

Today, organisations are resorting to social networks to engage with customers. These social media interactions result in social content, which, if well-managed, can lead to innovative improvements in the value offerings of the organisations. Thus, a proper social content management framework needs to be in place. However, there is a limited study in the concepts of social content and social content management. Based on literature review, this article articulates the components of the social content management framework and its building blocks based on the service science approach. The Delphi technique is used to validate the framework, which involved obtaining consensus among the experts by using a set of questionnaire. There are three components that are being validated, namely, factors that affect social content management, the definitions of social content and social content management, and the framework as a whole. It is hoped that the framework will be useful for researchers and practitioners in the field of social content management.

Keywords: Delphi technique; social media; social content management; social content; service science

ABSTRAK

Kini, organisasi mengguna pakai rangkaian sosial bagi libat urus dengan pelanggan. Interaksi dalam media sosial yang menghasilkan kandungan sosial, sekiranya diurus dengan baik, boleh membawa kepada penambahbaikan yang inovatif terhadap nilai yang ditawarkan oleh organisasi. Sehubungan dengan itu, kerangka pengurusan kandungan sosial yang tepat perlu tersedia. Walau bagaimana pun, kajian tentang konsep kandungan sosial dan pengurusan kandungan sosial masih terhad. Berdasarkan kajian susastera, artikel ini memperihalkan tentang komponen kerangka pengurusan kandungan sosial berdasarkan pendekatan sains khidmat. Teknik Delphi diguna pakai untuk mengesah kerangka, iaitu melalui konsensus pakar dengan menggunakan set soal selidik. Terdapat tiga komponen yang disah iaitu faktor yang mempengaruhi pengurusan kandungan sosial, takrif kandungan sosial dan pengurusan kandungan sosial, dan kerangka secara keseluruhan. Adalah diharap kerangka ini mempunyai nilai kepada penyelidik dan pengamal dalam bidang pengurusan kandungan sosial.

Kata kunci: Teknik Delphi; media sosial; pengurusan kandungan sosial; kandungan sosial; sains khidmat

INTRODUCTION

Social media is a new phenomenon that transforms communication patterns between the organisations and their customers. Content from social media proved to be valuable inputs to organizations, and could be the catalyst for service innovation (Alizadeh & Mat Isa 2015; Bertot & Janowski 2016; Criado, Almazan & Gil-Garcia 2013; Kilgour et al. 2015; Mohamad Salleh & Mohd Ilham 2017; Salman et al. 2016; Zheng & Zheng 2014). However, unstructured social content needs to be managed to ensure that it has value to the organisations and the customers. This points to the need for social content management framework to help manage social content effectively (Aladwani 2014; Herbst & vom Brocke 2013).

A review of the literature on social content management, revealed that there is a need for further elaborations on the social content management framework and the definition of social content management (Aladwani

2014). In this paper, it is proposed that the social content management framework and its factors, the definition of social content management and social content (to support the definition of social content management), is developed through the lens of service science. This is achieved via the Service Dominant Logic (SD-L) which was introduced and improved by Vargo and Lusch (2004, 2008, 2016) and the DART model which was introduced by Prahalad and Ramaswamy (2004) and improved by Ramaswamy and Ozcan (2014). The service science approach is deemed appropriate since the use of social media as an engagement platform (which resulted in the creation of social content) between organisations and its stakeholders allow for value co-creation which is the fundamental concept on which the SD-L builds on (Mukhtar, Ismail & Yahya 2012). This particular viewpoint allows value to be part of the artefact under scrutiny in managing social content. (Bakunzibake & Klein 2016; Herbst & vom Brocke 2013; O'Callaghan & Smits 2005).

LITERATURE REVIEW

PREVIOUS WORKS IN SOCIAL CONTENT MANAGEMENT

Past research revealed that there were limited studies conducted specifically in the social content management field. This is not surprising because social content is an output of social media interactions which can be considered as a new phenomenon. Miles (2011) and Moore (2011) discussed on the evolution of the system-of-records, namely the current content management which is known as enterprise content management (ECM), to the system-of-engagement which reflects the social content management system. As such, social content management could be regarded as a natural result of the evolution of ECM. A study by Davies et al. (2012) reported on the platform that discussed on health care policies in the United States. Herbst and vom Brocke (2013) reported on the issues and challenges in the social content management system. Review articles by Wan Ahmad, Mukhtar and Mat Taib (2016) and Wan Ahmad, Mukhtar and Yahya (2017a) focused on the elements and factors that could affect social content management based on previous studies in ECM. Besides that, research by Wan Ahmad, Mukhtar and Yahya (2018) identified the issues and challenges in the social content management field.

Research into the models or frameworks of social content management is exemplified by the work of Aladwani (2014) who proposed a process-oriented model that could assist organisations in managing social content. Besides that, studies conducted by Wan Ahmad and Mukhtar (2016, 2017) that focused on the content lifecycle, reported on the efforts to develop social content management models based on the service science approach.

DEFINITION OF SOCIAL CONTENT AND SOCIAL CONTENT MANAGEMENT

On the issue of the definition of social content and social content management, the literature revealed that it was contingent on the respective researchers (Aladwani 2014). For instance, Glazkov (2005) defined social content management as “a set of concepts, methodologies, and standards, which enable and facilitate creation, organization, and maintenance of content by means of social interaction of individuals online,” whilst Aladwani (2014) defined the social content management as “the deliberate and dynamic management of all aspects of internal and external social content in a business including data, technologies, processes, human, and organizational elements in order to create and maintain long term value for the business”. The differences in emphasis in the stated definitions posed some difficulties in furthering the research into social content management. It is thus our intention to develop and validate a definition of social content and social content management that is agreed upon by both researchers in the field and practitioners.

In this study, the definition of social content and social content management is derived from the service science approach. Therefore, this study defined the social content as:

“Unstructured content resulted from the active interaction of actors on social media platforms through service exchange and resource integration.”

This is because social content is an unstructured content that arises from the interactions between two or more parties which are referred to as actors. This interaction takes place on a social media platform involving the exchange of services between organisations and customers. Besides that, in order for service exchange to happen, both parties need to integrate relevant resources, namely the dynamic resources, which are referred to as operand resource and static resources which are referred to as operant resource. Operant resource are resources such as skills and knowledge whereas operand resource are resources such as technology, human resources, and budget.

Apart from the definition of social content, the social content management is also defined in this study as:

“The dynamic process that acted upon the social content, that is governed by the institutions and institutional arrangement that resulted in the progress of service ecosystems itself and subsequently produce service innovation.”

This is because, social content need to be managed and governed by a good mechanism. In addition, the management of social content must be performed in a good service ecosystem to foster the innovation of services offered by the organisation. Both definitions are validated in this study by the Delphi Technique.

SOCIAL CONTENT MANAGEMENT FROM SERVICE SCIENCE APPROACH

In an earlier work, Wan Ahmad, Mukhtar and Yahya (2017b), have explained in some detail about the elements that affect social content management from the viewpoint of service science. Via an examination of the literature and content analysis, it was discovered that the elements that affect social content management could be classified into five main elements and that these elements could be further detailed into factors as stated in Table 1.

The elements and factors depicted in Table 1 are based on the concepts taken from the SD-L and from the concept of value co-creation as it is operationalised in the DART Model. These elements and factors are then moulded into a social content management framework (See Figure 1).

The proposed framework is explained in the following high-level viewpoints,

Actors In social content management, the actor plays an important role because social media interactions emphasize on the interaction of different parties. In this study, the actor is divided into two, namely the organisations and the customers. Due to the different roles

TABLE 1. The elements and factors of social content management from service science approach (Wan Ahmad, Mukhtar & Yahya 2017b)

Element	Factor
A. Actor	A1. Participation A2. Strategic implication
B. Resource integration	B1. Operant resource B2. Operand resource B3. Integration
C. Service exchange	C1. Content lifecycle C2. Service platform
D. Institutions and institutional arrangement	D1. Strategy D2. Governance D3. Strategic managerial aspect
E. Service ecosystem	Service ecosystem

and responsibilities in the organisation while managing the social content, there are three levels of management that participate in social content management. They are the top management level, responsible for directing the vision of social content management, the tactical level, responsible for managing and analysing the content, and the operational level of management that deals and engages with the customers. Aside from participation, the impact of participation, namely the strategic implication is also important in social content management. It is to ensure the best return for both parties who are involved in social media interactions.

Resource Integration Social content management involves multiple resources. Hence, to manage the social content, there is a need to have a dynamic resource, which is referred here as operant resource such as skills

and knowledge, static resources which is referred here as operand resource such as technology, optimum man power, and sufficient budget and also, the integration of both the operant and operand resources.

Service Exchange Service exchange enables the exchange of services in the interaction process between the organisations and their customers, to permit the delivery of content and services based on social content acquired. To innovate the services, social content needs to be captured, managed, analysed, and maintained in order to highlight its potential because not all contents are relevant in the decision-making process. The service exchange needs to occur via a good service platform.

Institutions and Institutional Arrangement Since the management of social content involves multiple actors and content asset such as the use of operant and operand resources, it needs to be governed by a proper mechanism, which, in this case is known as the institutions and institutional arrangement. In this study, it involves strategy, governance, which comprises of policy and structure, and strategic managerial aspect which comprises of commitment and change management.

Service Ecosystem All elements and factors in social content management need to exist in a vibrant service ecosystem in order to enable a smooth management of the social content.

METHODOLOGY

The Delphi technique is adopted as a method for consensus attainment to verify the social content management

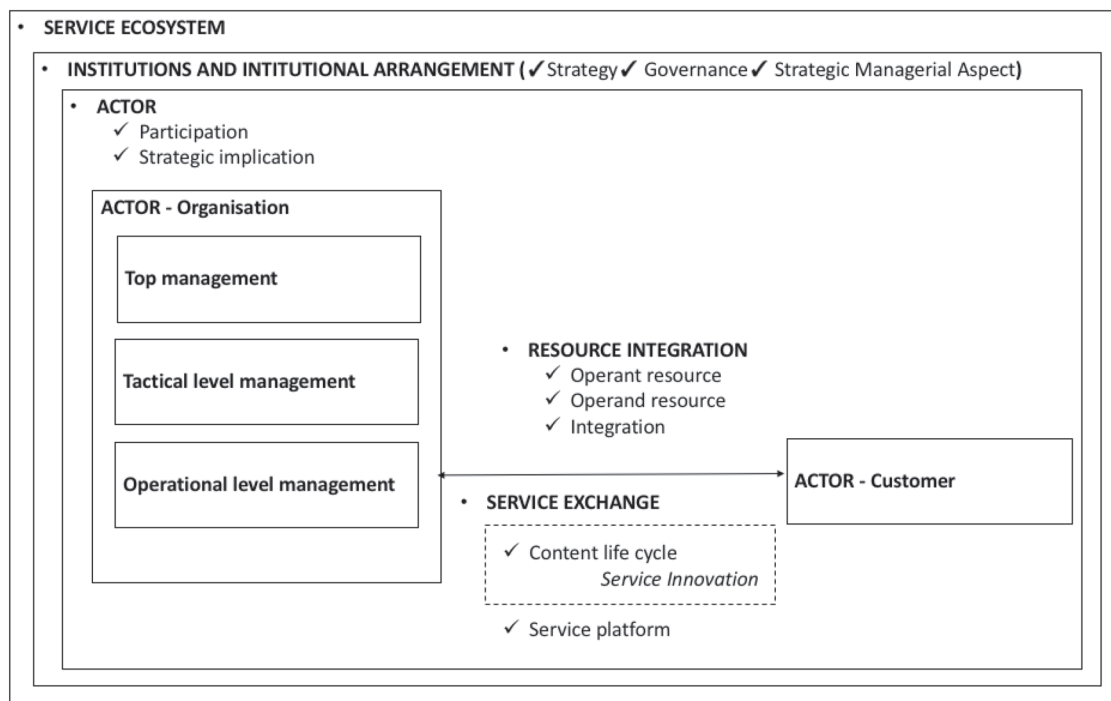


FIGURE 1. Social content management framework from service science approach

framework and both definitions. The Delphi technique was first introduced in the 1950's at the Rand Corporation and has since been applied in various fields. According to Siraj et al. (2012), Delphi technique is a suitable approach to attain consensus among experts. The steps followed in this study is adapted from Skulmoski, Hartman and Krahn (2007), Teo et al. (2015) and Mat Nor (2013) as shown in Figure 2.

An explanation on the chosen panel of experts, data collection procedure and data analysis procedure are detailed in the next subsection.

PANEL OF EXPERTS

In this study, experts are selected based on their expertise and/or knowledge in the field of ECM, social content management, or service science. Communications with the experts were done through e-mail and supported by the official letter from the relevant institutions, in order to obtain the agreement of participation in the Delphi process. The experts were given the appropriate time frame to provide feedback.

In the context of the number of experts required to be involved in a Delphi study, there is no specific requirement. Based on Delbecq, Van de Ven and Gustafson (1975), the number of experts is according to the scope and the appropriate resources. Research

from Rowe and Wright (1999) also proved that there is no relationship between the panel size and the effectiveness of the criteria. Bantel (1993) suggested that heterogeneity, which refers to experts with the same expertise, but from different professional or social groups, in a decision-making group may lead to better performance than homogeneity, which refers to experts from the same discipline and profession. Hence, in this study, the experts were from heterogeneous groups, namely from government agencies (referred here as "agency"), consultancy companies (referred here as "consultancy"), other companies (referred here as "company"), and academic institutions (referred here as "institution"). Out of the 17 invited experts, only 14 experts agreed to participate in this study as stated in Table 2.

DATA COLLECTION AND ANALYSIS PROCEDURE

Data collections were carried out in two Delphi rounds:

1. For Delphi Round 1, the procedure was conducted from 23 Mac until 10 April 2017. The questionnaire was distributed to 14 experts. All 14 experts agreed to participate and provided feedback. For the questionnaire, it was developed based on two categories, namely item for each factor, and generic

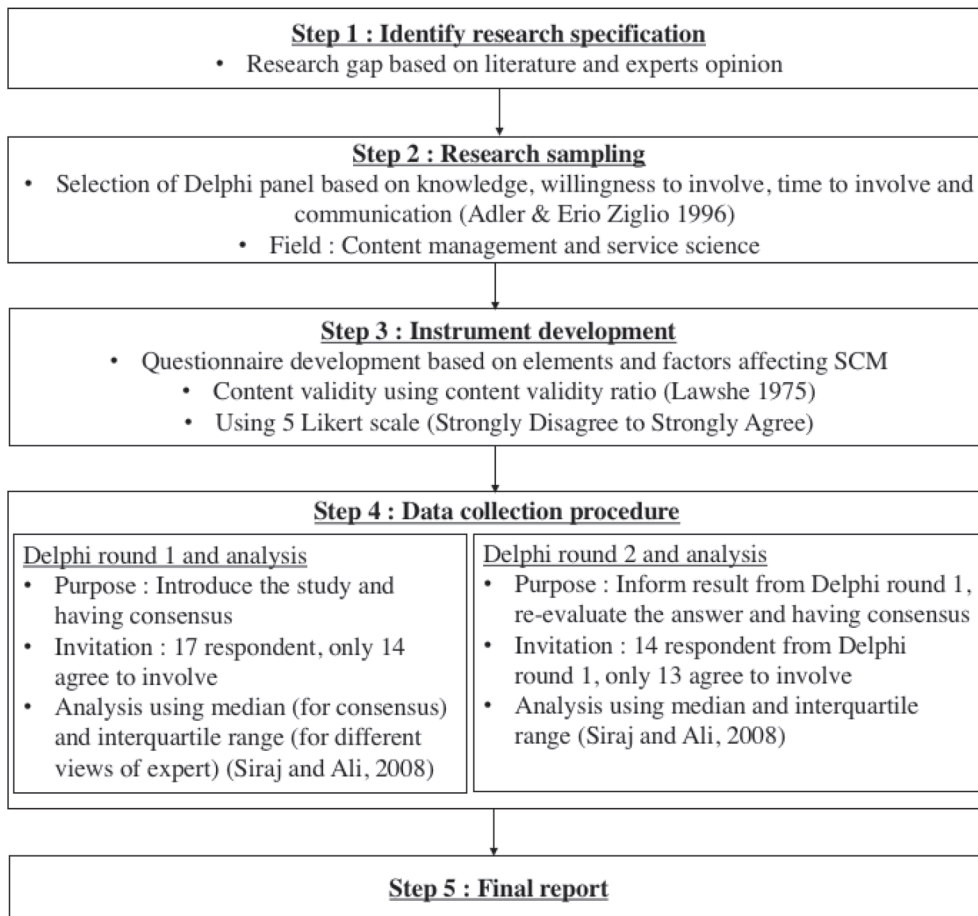


FIGURE 2. Steps for Delphi technique

TABLE 2. Panel of experts

Panel ID	Organisation	Expertise and Experience	Justifications
Panel 1	Agency A	Head of ICT Consultant (Strategist) 35 years in total with 8 years in social content management and ECM	Involved in the project regarding the management of content including social content. His current position is Consultant at Company XYZ which is involved in projects related to ICT strategic planning and content management.
Panel 2	Agency A	ICT Expert (Information Management) 32 years in total with 12 years in social content management and ECM	Involved in the project regarding the management of content including social content.
Panel 3	Agency B	ICT Expert (Information Management) 26 years in total with 10 years in social content management and ECM	Involved in the project regarding the management of content including social content.
Panel 4	Agency A	ICT Expert (Information Management) 19 years in total with 12 years in social content management and ECM	Involved in the project regarding the management of content including social content.
Panel 5	Agency B	Chief Assistant Director 11 years in total with 4 years in social content management and ECM	Involved in the management of social content in a government initiative which manage any query, comments and feedback from citizens from all platforms including social media platforms.
Panel 6	Agency C	Public Relation Officer (PRO) 12 years in total with 5 years social content management	Involved in the management of social content in the organisations. PRO is responsible for the management of social content in the organisation. Her current position is monitoring all PRO under Agency C (regarding to the official task of PRO).
Panel 7	Agency D	PRO 18 years in total with 3 years in social content management	Involved in the management of social content in the organisation.
Panel 8	Consultancy A	Executive Director 22 years in total with 12 years in social content management and ECM	Involved in the consultation project including the management of social content. His current project is leading his team (as an Exclusive Partner) in the ICT Transformation Program in Agency DEF. This project is mainly focusing on the ICT transformation plan including the initiative from the social media content received from the agency's official social media platform.
Panel 9	Consultancy A	Senior Manager 22 years in total with 12 years in social content management and ECM	Involved in the consultation project including the management of social content. He is a Senior Consultant in an ICT Transformation Program in Agency DEF.
Panel 10	Company A	Executive Director 7 years in total with 5 years in social content management and ECM	Involved in managing all content including social content in Company A. This company used social media platform as a marketing and engagement tools with their customers.
Panel 11	Agency E	Director 9 years in total with 5 years in social content management and ECM	Involved in monitoring social content. She is the head of new media department.
Panel 12	Company B	Manager 9 years in total with 5 years in ECM	Involved in the management of all content in Asia Region.
Panel 13	Institution A	Senior Lecturer 16 years in total with 5 years in service science	Involved in the field of service science. She is the member of Service Science Research Unit in Institution A.
Panel 14	Institution B	Senior Lecturer 10 years in total with 8 years in service science	Involved in the field of service science. He is the leader of Service Science Group in Institution B.

item for each factor to show the importance of the factor. This instrument applied 5 points scales namely from “strongly disagree to strongly agree”.

2. For Delphi Round 2, the procedure was conducted from 29 May until 14 July 2017. The questionnaire was distributed to 14 experts (the same panel as in Round 1), however, only 13 experts agreed to participate and provided feedback. Based on Saedah Siraj et al. (2012) in subsequent rounds, the experts answers should be following these three criteria, (1) constant with the answer as stated in Round 1 if the answer is inside interquartile range (IQR), (2) changing the previous answer if the answer is outside IQR, (3) offering reasons if their remaining answer is outside the IQR. Therefore, the updated questionnaire was developed based on these criteria.

Data analysis was based on descriptive analysis according to the experts' answer, namely median score and inter quartile range (IQR) value. Median score is selected for determining the consensus (Siraj et al. 2012), while the IQR value is to identify relationship between experts' and stage of consensus among experts (Siraj et al. 2012; Siraj & Saleh 2003). The median is chosen due to its accuracy in showing consensus of the panel's view (Martino 1973). The IQR value that represents the stage of consensus among panel members. This is described in Table 3.

RESULTS

The results consist of three components which are factors that affect the social content management; definition of social content and social content management; and social content management framework. The detail explanations are given in the following sub-sections.

COMPONENT 1: FACTORS THAT AFFECT SOCIAL CONTENT MANAGEMENT

STATISTICAL ANALYSIS

For Delphi Round 1, all items have a median value of 4. Therefore, the levels of agreement among the panelists for all items are at 'agree' and 'strongly agree'. In terms of stage of consensus among the experts, most items have a high degree of consensus (IQR value of 0 to 1).

Most experts 'agreed' and 'strongly agreed' with items that have high degree of consensus. Three items received moderate consensus. For the moderate consensus, there is an uneven distribution of answers among experts which are towards agree namely, 'partially agree', 'agree' and 'strongly agree'. Items that received moderate consensus are,

- 1.A1-2 In social content management, the involvement of top management is necessary to govern the human resources and content assets.
- 13.B3-2 To highlight the value in social content management, organisations need to ensure software for social content management is integrated with other applications, such as integration with MS Word and email.
- 20.D1-6 Organisations need to ensure social content management corporate strategy takes into account the requirement of change management program.

For Delphi Round 1 also, according to overall items, several experts 'disagree' with eight items but they are in the minority and none of the experts responded 'strongly disagree'. The 'disagree' items are,

- 1.A1-4 In social content management, the involvement of top management is necessary to give full commitment while managing social content.
- 2.A1-8 In social content management, the involvement of tactical (middle) level of management is necessary to control the governance, which include budget planning, managing quality and human resources.
- 2.A1-10 In social content management, the involvement of tactical (middle) level of management is necessary to maintain the social content that has been analysed in the content lifecycle.
- 7.A2-1 Strategic implications that result from the participation of actors while managing social content are organisations only suggest value to customers.
- 13.B3-2 To highlight the value in social content management, organisations need to ensure software for social content management is integrated with other applications such as integration with MS Word and email.
- 16.C1-6 For services innovation via value co-creation in social content management, organisations need to ensure that the content lifecycle

TABLE 3. Stage of consensus

Stage of consensus	High consensus	Moderate consensus	Without consensus
IQR value	0 to 1	1.01 to 1.99	2.0 and above
Description	The majority of experts give the same value to the item described, therefore, the panel has an agreement on the item.	The experts give a moderate interest but still giving an agreeable value.	The experts gave various answers and did not reach agreement on the item.

emphasises on analysis of content for service innovation, with the result being featured in an understandable format to the stakeholders.

21.D1-10 To highlight the value of content through a designed strategy, organisations need to ensure challenges in the management of content is reduced.

26.D3-3 In social content management, commitment from management and stakeholders is important to avoid obstacles in managing social content.

For Delphi Round 2, all items also have a median value of 4, with the levels of agreement among the experts are at 'agree' and 'strongly agree'. For stage of consensus, all items have a high degree of consensus (IQR value of 0 to 1). In terms of overall items, several experts maintained their disagreement with the items but the number are in the minority. The items which maintained disagree (5 out of 8 items in Round 1) are 2.A1-8, 7.A2-1, 13.B3-2, 16.C1-6, and 21.D1-10. No experts responded 'strongly disagreed' with all submitted items.

FINDINGS AND DISCUSSION

Item 1.A1-2, 13.B3-2, and 20.D1-6 from Round 1 show the difference in Round 2, namely the stage of consensus change from moderate to high consensus. These means, the items are being agreed by the experts. Besides that, comparing to the disagree results from Round 1, item 1.A1-4, 2.A1-10, and 26.D3-3 finally received high consensus, namely IQR value of 0 to 1, among the experts in Round 2. This proves that the items are important in social content management.

In conclusion, from statistical analysis (see Appendix A for the details), through median score and IQR values in Round 1 and 2, the findings showed that all proposed factors could affect the social content management. The findings in Round 2 strengthen the findings in Round 1 whereby all items received a high consensus among the experts with the answer towards 'agree'. Detailed analysis of Round 1 and Round 2 of Delphi techniques based on the proposed factors are:

1. *Participation* - Based on the generic item, all panel members agree that participation is important in social content management. In organisations, involvement based on the managerial level, namely top management, tactical level of management, and operational level of management is critical to the management of social content. The involvement of all actors, that is, organisations and customers, is important, especially in the use of technology and the change management program. In addition, engagement between organisations and customers is important in the management of social content, namely in the process of socialization, collaboration, and in producing value co-creation as a result of collaboration between the both parties.

2. *Strategic implication* – Based on the generic item, all panel members agree that the strategic implication is important in managing social content. Strategic implications establish collaboration between organisations and customers, namely, the organisations only propose the value of the services offered and the customers determine the value obtained from the services offered. The result of the value co-creation between the organisations and the customer creates innovation opportunities for the services offered by the organisation and at the same time increases the level of customer trust in the organisations because the services offered are based on customer needs and requirements.

3. *Operant resource* – Based on the generic item, all panel members agree that the operant resource is important in the management of social content. Operant resource such as skills, capabilities, and knowledge in social content management, especially when developing strategies, managing social content in the content lifecycle, managing technologies, creating collaborative environments, and helping the organisation of decision-making regarding service innovation offered by the organisation.

4. *Operand resource* – Based on the generic item, all panel members agree that the operand resource is important in the management of social content. Operand resources such as optimal technology, hardware, software, repositories, budget, and manpower are essential in supporting the management of social content.

5. *Integration* – Based on the generic items, all panel members agree that integration is important in managing social content. Integration between resources is important in promoting the value of social content management, namely through the integration of various resources involved in the management of social content, the integration of social content software with other applications such as email, and the integration of repositories which store social content with other applications to provide appropriate input.

6. *Content lifecycle* – Based on the generic item, all panel members agree that content lifecycle is important in social content management. The content lifecycle is important in the content management process between the organisations and the customers and the mechanism for identifying opportunities in innovating the services offered. In order to innovate services, namely the result of the value co-creation between organisations and customers on social media platforms, lifecycle processes encompass of capturing of content through interaction, management of content, analysing the content, and maintaining the content.

7. *Service platform* – Based on the generic item, all panel members agree that the service platform is important in social content management. The service platform is essential in managing social content with regard to having a fast system, user-friendly interface, and facilitating different categories of content links.

8. *Strategy* – Based on the generic item, all panel members agree that strategy is important in social content management. Strategies in social content management take into account the aspects of actors, content, processes, technologies, social content management mechanisms, and change management programs. The importance of strategy is seen at the optimum level of content management, content is in accordance with organisational objectives, good content management practices, challenges in managing content are reduced, and the content obtained as the assets to organisation.

9. *Governance* – Based on the generic item, all panel members agree that governance is important in the management of social content. Governance for social content management emphasises the need to comply with existing policies, have appropriate policies specifically, have a sound management structure, and a clear set of roles for all actors involved in managing social content.

10. *Strategic managerial aspect* – Based on the generic item, all panel members agree that strategic managerial aspect is important in managing social content. For strategic managerial aspects, social content management needs the commitment from all parties involved and have an organized change management program. The commitment of all parties is important in order to avoid barriers in managing social content and ensuring social content management is acceptable in an organisation's environment. Change management is important in ensuring the strategies outlined for managing social content can be achieved, addressing human-related issues, and increasing the source of acting actors involved.

11. *Service ecosystem* – Based on the generic item, all panel members agree that service ecosystem is important in social content management. Service ecosystem involves a holistic environment in managing social content taking into account organisational workflows, systematic project management mechanisms, risk expectations, good environment, active collaboration between actors, and promotion to knowledge sharing based on the managed social content.

COMPONENT 2: DEFINITION OF SOCIAL CONTENT AND SOCIAL CONTENT MANAGEMENT

STATISTICAL ANALYSIS

For Delphi Round 1 and 2, the definitions of social content and social content management received a median value of 4. Therefore, the levels of agreement among experts for both definitions are at 'agree' and 'strongly agree'. In terms of the consensus among the experts, both definitions have a high degree of consensus, whereby most experts responded 'agree' and 'strongly agree' with the proposed definitions. All experts responded either with 'partially agree', 'agree', or 'strongly agree' for the definition of social content.

Only one expert did not agree with the definition of social content management. No experts responded 'strongly disagree' for both proposed definitions.

FINDINGS AND DISCUSSION

Considering that both definitions have a median value of 4 and above and, since the level of consensus in Rounds 1 and 2 are high (See Appendix A for detailed statistical results), therefore, all proposed definitions are accepted. The accepted definition for social content is,

“Unstructured content resulted from the active interaction of actors on social media platforms through the service exchange and resource integration.”

The accepted definition for social content management is,

“The dynamics process of social content that is governed by the institutions and institutional arrangement and progress on service ecosystem to produce service innovation.”

COMPONENT 3: SOCIAL CONTENT MANAGEMENT FRAMEWORK

SUMMARY OF DELPHI ROUND 1

For the proposed social content management framework from science service approach (Figure 1), there are two insights gained from the experts, which are, (1) “The use of layman's terms is to ensure that the framework is understandable and should be able to guide the related organisations in managing social content. In the context of framework verification in the first round of the questionnaire, the terms used are in reference to the chosen theory. Layman's terms would be incorporated in the high-level guidelines, during the evaluation of the framework through case studies. Hence, for the purpose of Delphi Round 2, these terms are retained and would be refined in the next phase”, and (2) “Explanations should be offered to the management level of the organisations involved in managing social content. For the purpose of this study, three levels of management are involved based on their specific roles. These improvements were made and forwarded in Delphi Round 2”.

SUMMARY OF DELPHI ROUND 2 AND DISCUSSION

In Delphi Round 2, all experts agreed with the proposed framework. As a conclusion, the proposed framework as stated in Figure 1 is accepted.

MANAGERIAL IMPLICATION

For impact to management, a validated framework is expected to assist organizations in managing social content based on the validated factors. The proposed definitions are also expected to guide organizations in understanding the context of social content and social content management.

Since studies in social content management are still in its infancy, it is hoped that this study would contribute significantly to the domain of social content management. In addition, this study is also expected to serve as a starting point for researchers in conducting research on social content management.

CONCLUSION

This article began with the proposal of a social content management framework. It then went on to describe the steps involved in the Delphi Technique which is used to validate the framework. The validation exercise was done on three different aspects of the framework, namely, the social content management framework as a whole, the definition of social content and the definition of social content management. The median score and IQR values are used to analyse the data collected from two rounds of Delphi. The Delphi Technique was conducted with a heterogeneous panel of experts from various types of organisations, namely government agencies, consultancy companies, other companies, and academic institutions. The panel members were selected based on the criteria of expertise and knowledge in content management, social content management and service science. Future studies would evaluate the suitability of applying the proposed framework in a real working environment. It is to ensure that the proposed framework has a practical value and could benefit practitioners who want to embark on social content management.

ACKNOWLEDGEMENT

The study is supported by Research Grant FRGS/2/2014/ICT01/UKM/02/1, Ministry of Education Malaysia, Universiti Kebangsaan Malaysia and Public Service Department of Malaysia.

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Wan Azlin Zurita Wan Ahmad (corresponding author)
Faculty of Information Science and Technology
Universiti Kebangsaan Malaysia
43600 UKM Bangi, Selangor, MALAYSIA.
E-Mail: azlinzurita@gmail.com

Muriati Mukhtar
Faculty of Information Science and Technology
Universiti Kebangsaan Malaysia
43600 UKM Bangi, Selangor, MALAYSIA.
E-Mail: muriati@ukm.edu.my

Yazrina Yahya
Faculty of Economy and Management
Universiti Kebangsaan Malaysia
43600 UKM Bangi, Selangor, MALAYSIA.
E-Mail: yazrina@ukm.edu.my

APPENDIX A

DETAIL STATISTICAL ANALYSIS FOR DELPHI ROUND 1 AND ROUND 2

A) Factors that affect the social content management: Comparison of Delphi result for Round 1 and Round 2 (HC = high consensus, MC = moderate consensus)

No	Items	Delphi Round 1 (14 experts)							Delphi Round 2 (13 experts)						
		Panel Answer				Median	IQR	Interpretation	Panel Answer				Median	IQR	Interpretation
		2	3	4	5				2	3	4	5			
A1 - Participation															
1	1.A1-1	0	0	4	10	5.00	0.75	HC	0	0	4	9	5.00	1	HC
2	1.A1-2	0	5	5	4	4.00	1.75	MC	0	5	5	3	4.00	1	HC
3	1.A1-3	0	1	3	10	5.00	0.75	HC	0	1	3	9	5.00	1	HC
4	1.A1-4	1	1	7	5	4.00	1	HC	0	3	8	2	4.00	0	HC
5	1.A1-5	0	1	4	9	5.00	1	HC	0	1	4	8	5.00	1	HC
6	1.A1-6	0	2	5	7	4.50	1	HC	0	2	5	6	4.00	1	HC
7	2.A1-7	0	1	4	9	5.00	1	HC	0	1	4	8	5.00	1	HC
8	2.A1-8	1	1	5	7	4.50	1	HC	1	1	6	5	4.00	1	HC
9	2.A1-9	0	1	5	8	5.00	1	HC	0	1	4	8	5.00	1	HC
10	2.A1-10	1	2	5	6	4.00	1	HC	0	3	4	6	4.00	1	HC
11	3.A1-11	0	2	4	8	5.00	1	HC	0	2	4	7	5.00	1	HC
12	3.A1-12	0	2	5	7	4.50	1	HC	0	2	5	6	4.00	1	HC
13	4.A1-13	0	0	7	7	4.50	1	HC	0	0	7	6	4.00	1	HC
14	4.A1-14	0	3	5	6	4.00	1	HC	0	3	5	5	4.00	1	HC
15	4.A1-15	0	3	5	6	4.00	1	HC	0	3	5	5	4.00	1	HC
16	5.A1-16	0	0	7	7	4.50	1	HC	0	0	7	6	4.00	1	HC
17	5.A1-17	0	0	6	8	5.00	1	HC	0	0	6	7	5.00	1	HC
18	5.A1-18	0	2	6	6	4.00	1	HC	0	2	5	6	4.00	1	HC
19	6. (Generic)	0	0	5	9	5.00	1	HC	0	0	5	8	5.00	1	HC
A2 – Strategic Implication															
20	7.A2-1	2	3	7	2	4.00	1	HC	2	3	7	1	4.00	1	HC
21	7.A2-2	0	2	4	8	5.00	1	HC	0	1	4	8	5.00	1	HC
22	7.A2-3	0	2	9	3	4.00	0	HC	0	2	8	3	4.00	0	HC
23	7.A2-4	0	2	7	5	4.00	1	HC	0	2	7	4	4.00	1	HC
24	7.A2-5	0	0	4	10	5.00	0.75	HC	0	0	4	9	5.00	1	HC
25	8. (Generic)	0	0	7	7	4.50	1	HC	0	0	7	6	4.00	1	HC
B1 – Operant Resource															
26	9.B1-1	0	1	3	10	5.00	0.75	HC	0	1	3	9	5.00	1	HC
27	9.B1-2	0	1	8	5	4.00	1	HC	0	1	8	4	4.00	1	HC
28	9.B1-3	0	2	6	6	4.00	1	HC	0	1	7	5	4.00	1	HC
29	9.B1-4	0	1	4	9	5.00	1	HC	0	1	3	9	5.00	1	HC
30	9.B1-5	0	1	6	7	4.50	1	HC	0	1	6	6	4.00	1	HC
31	10. (Generic)	0	0	5	9	5.00	1	HC	0	0	5	8	5.00	1	HC
B2 – Operand Resource															
32	11.B2-1	0	2	4	8	5.00	1	HC	0	2	4	7	5.00	1	HC
33	11.B2-2	0	3	6	5	4.00	1	HC	0	3	6	4	4.00	1	HC
34	11.B2-3	0	1	6	7	4.50	1	HC	0	1	6	6	4.00	1	HC
35	11.B2-4	0	3	6	5	4.00	1	HC	0	3	6	4	4.00	1	HC
36	11.B2-5	0	0	7	7	4.50	1	HC	0	0	7	6	4.00	1	HC
37	11.B2-6	0	3	8	3	4.00	0	HC	0	3	8	2	4.00	0	HC
38	12. (Generic)	0	0	8	6	4.50	1	HC	0	0	7	6	4.00	1	HC
B3 - Integration															
39	13.B3-1	0	1	7	6	4.00	1	HC	0	1	7	5	4.00	1	HC
40	13.B3-2	1	3	6	4	4.00	1.5	MC	1	2	7	3	4.00	0	HC
41	13.B3-3	0	2	7	5	4.00	1	HC	0	1	8	4	4.00	1	HC
42	14. (Generic)	0	2	7	5	4.00	1	HC	0	1	8	4	4.00	1	HC
C1 – Content Lifecycle															
43	15.C1-1	0	0	6	8	5.00	1	HC	0	0	6	7	5.00	1	HC
44	15.C1-2	0	2	5	7	4.50	1	HC	0	2	5	6	4.00	1	HC
45	15.C1-3	0	0	6	8	5.00	1	HC	0	0	6	7	5.00	1	HC
46	16.C1-4	0	2	6	6	4.00	1	HC	0	2	6	5	4.00	1	HC
47	16.C1-50	0	1	4	9	5.00	1	HC	0	1	4	8	5.00	1	HC
48	16.C1-6	1	0	5	8	5.00	1	HC	1	0	6	6	4.00	1	HC
49	16.C1-7	0	0	5	9	5.00	1	HC	0	0	5	8	5.00	1	HC
50	17. (Generic)	0	0	5	9	5.00	1	HC	0	0	5	8	5.00	1	HC

No	Items	Delphi Round 1 (14 experts)							Delphi Round 2 (13 experts)						
		Panel Answer				Median	IQR	Interpretation	Panel Answer				Median	IQR	Interpretation
		2	3	4	5				2	3	4	5			
C2 – Service Platform															
51	18.C2-1	0	2	4	8	5.00	1	HC	0	2	4	7	5.00	1	HC
52	18.C2-2	0	0	3	11	5.00	0	HC	0	0	3	10	5.00	0	HC
53	18.C2-3	0	3	7	4	4.00	0.75	HC	0	3	7	3	4.00	0	HC
54	19. (Generic)	0	0	5	9	5.00	1	HC	0	0	5	8	5.00	1	HC
D1 - Strategy															
55	20.D1-1	0	1	7	6	4.00	1	HC	0	1	7	5	4.00	1	HC
56	20.D1-2	0	0	6	8	5.00	1	HC	0	0	6	7	5.00	1	HC
57	20.D1-3	0	2	6	6	4.00	1	HC	0	2	6	5	4.00	1	HC
58	20.D1-4	0	1	6	7	4.50	1	HC	0	1	6	6	4.00	1	HC
59	20.D1-5	0	1	6	7	4.50	1	HC	0	1	6	6	4.00	1	HC
60	20.D1-6	0	4	6	4	4.00	1.5	MC	0	4	6	3	4.00	1	HC
61	21.D1-7	0	1	6	7	4.50	1	HC	0	1	6	6	4.00	1	HC
62	21.D1-8	0	2	7	5	4.00	1	HC	0	2	7	4	4.00	1	HC
63	21.D1-9	0	1	7	6	4.00	1	HC	0	1	7	5	4.00	1	HC
64	21.D1-10	1	0	6	7	4.50	1	HC	1	0	6	6	4.00	1	HC
65	21.D1-11	0	0	4	10	5.00	0.75	HC	0	0	4	9	5.00	1	HC
66	22. (Generic)	0	1	6	7	4.50	1	HC	0	1	6	6	4.00	1	HC
D2 - Governance															
67	23.D2-1	0	1	2	11	4.00	0	HC	0	1	2	10	4.00	0	HC
68	23.D2-2	0	0	5	9	5.00	1	HC	0	0	5	8	5.00	1	HC
69	23.D2-3	0	0	6	8	5.00	1	HC	0	0	6	7	5.00	1	HC
70	23.D2-4	0	0	4	10	5.00	0.75	HC	0	0	4	9	5.00	1	HC
71	24. (Generic)	0	0	6	8	5.00	1	HC	0	0	6	7	5.00	1	HC
D3 – Strategic Managerial Aspect															
72	25.D3-1	0	0	6	8	4.00	1	HC	0	0	6	7	4.00	1	HC
73	25.D3-2	0	3	5	6	4.00	1	HC	0	3	5	5	4.00	1	HC
74	26.D3-3	1	0	6	7	4.00	1	HC	0	1	7	5	4.00	1	HC
75	26.D3-4	0	1	7	6	4.00	1	HC	0	1	7	5	4.00	1	HC
76	27.D3-5	0	1	5	8	4.00	1	HC	0	0	6	7	4.00	1	HC
77	27.D3-6	0	3	4	7	4.00	1	HC	0	3	4	6	4.00	1	HC
78	27.D3-7	0	1	7	6	4.00	1	HC	0	1	7	5	4.00	1	HC
79	28. (Generic)	0	0	6	8	4.00	1	HC	0	0	6	7	4.00	1	HC
E1 – Service Ecosystem															
80	29. E1-1	0	1	7	6	4.00	1	HC	0	1	6	6	4.00	1	HC
81	29. E1-2	0	1	10	3	4.00	0	HC	0	1	9	3	4.00	0	HC
82	29. E1-3	0	1	8	5	4.00	1	HC	0	1	7	5	4.00	1	HC
83	29. E1-4	0	0	7	7	4.00	1	HC	0	0	6	7	4.00	1	HC
84	29. E1-5	0	1	7	6	4.00	1	HC	0	1	6	6	4.00	1	HC
85	29. E1-6	0	2	5	7	4.00	1	HC	0	2	5	6	4.00	1	HC
86	30. (Generic)	0	1	7	6	4.00	1	HC	0	1	6	6	4.00	1	HC

- b) Definition of social content and social content management: Comparison of Delphi result for Round 1 and Round 2 (HC = high consensus, MC = moderate consensus)

No	Items	Delphi Round 1 (14 experts)							Delphi Round 2 (13 experts)						
		Panel Answer				Median	IQR	Interpretation	Panel Answer				Median	IQR	Interpretation
		2	3	4	5				2	3	4	5			
1	Social content	0	3	7	4	4.00	0.75	HC	0	3	6	4	4.00	1	HC
2	Social content management	1	2	9	2	4.00	0	HC	1	2	8	2	4.00	0	HC