

Fostering a Virtual Knowledge Sharing Community in a Malaysian Financial Institution

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Abstract: The purpose of this research was to study the set-up process of cultivating a knowledge sharing community in a financial institution comprising of 500 over employees. The areas that were researched were – what major issues can be identified during the set-up phase, the critical success factors, and way-forward plans to sustain this program. This paper proposes in adopting an IS model in implementing a virtual knowledge sharing community. Conforming to a case study approach, the study investigates the outcomes of a 14-month on-going implementation program, encompassing of strategic discussions and multiple workshops in assessing critical knowledge assets and developing techniques in how best to manage explicit and tacit knowledge, amongst knowledge workers. The valuable insights were focused, in particular on KM training for the newly designated 'KM Stewards' who were responsible of driving the organisational KM strategic initiatives and the implementation of a KM capability assessment technique that can be adopted in a financial sector. Special emphasis was made in building the skills in intra-organisational cooperation and management engagement for meeting the challenge of 'capturing' and codifying tacit knowledge and ultimately the generation of lessons learned and fostering of virtual communities of practice in promoting a new form of 'collective intelligence' in the organisation. With practitioners' experience in adopting an IS model, this paper will highlight the implementation road map for assessing the usage of knowledge management systems, challenges faced by the KM Task Force, action plans and outcomes with the user community. Finally, this article will be able to contribute to the theoretical knowledge on knowledge sharing in the financial sector of domain. The research methodology is discussed, followed by results and a discussion of the results. Finally, conclusion and future research are presented.

Keywords: Implementing KM systems, Knowledge sharing communities, KM Task Force, Lessons learned, KM success factors

1. Introduction

Knowledge is always changing. Renewing knowledge and making it accessible is key for organisational competitiveness. Organizations rely on effective management and knowledge at every stage of the business cycle (Mia & Chowdhury, 2021). With the work-from-home era, Management is driven to develop technological strategies and action plans to ensure knowledge is virtually accessible and expertise of knowledge workers can be globally connected at an anytime and from an anywhere paradigm. Knowledge management systems are essential building blocks of a business's overall success formula and strategy execution shows where an organization excels, survives, or succumbs to external pressures (Twum, 2021).

Intensifying competitive pressures associated with globalization coupled with increasing project complexity have brought about a greater demand for all employees in the Malaysian Industrial Development Finance (MIDF) to be equipped with appropriate knowledge and skills. The value of knowledge was emphasised in Malaysia's Vision 2020, which indicated that the country needed to shift from a production-based economy to a knowledge-based economy. With the support of continuous government programs to encourage the sharing and managing of knowledge in the Malaysian agencies, there had been an increase of public and private agencies embarking on knowledge management (KM) initiatives albeit gradually. Specifically, tacit knowledge management is crucial in executing day-to-day job functions effectively, efficiently, and eventually enhancing the performance of organisations (Milton, N., Lambe, P., 2020). The organisational drive is to harness embedded knowledge residing amongst its employees and leverage in technological platforms to engage in creative problem solving. Thus, organisations are developing effective and efficient KM methods to address problems and benefit from opportunities (Tiwari, 2022), making KM increasingly vital.

There may be a wide range of KM implications in organisations, but there is also a growing body of evidence that shows that few are successful (Alharbi, G.L., 2023). This has caused controversy regarding KM's effects on various organization performance indicators [Al-Ahbab SA, et. al., 2019]. Due to these conflicting results, there is a call to shed more light on the organizational processes, systems, and other influencing factors that may determine the benefits in the association between KM and service efficacy (Alharbi, G.L., 2023). According to

research performed by Narayanan et al. (2020) on Malaysian SMEs, the perceived benefits include innovation speed and organizational performance. Kassim et al. (2016) in their research, suggested that effective KM will impact enhanced customers relations and better services. This research was to study the set-up process of implementing KNetwork, a knowledge management system (KMS), and cultivating a knowledge sharing community in MIDF. The areas that were researched were – what major issues can be identified during the set-up phase, the critical success factors adopting the De Lone and McLean IS model, and way-forward plans to sustain this program.

1.1 Research Problem

The KNetwork is designed as an online platform that can provide an effective knowledge sharing environment, which is independent of time and space, allowing practitioners to be connected to information well as the people who are able to provide this information. For Knowledge Workers who want to access latest policies, minutes of meetings, documented research and ‘captured and codified conversations’ via the AskMIDF forums, KNetwork can be utilised as an enabling environment to seek, embrace new knowledge that is focused on enhancing and expanding their collective awareness and capabilities. However, the mammoth task of an organisation, to implement and manage a successful knowledge repository, will require a solid understanding of the factors and skills that affect its usage and acceptance of KNetwork. The purpose of this study was therefore, to investigate determinants that influenced the successful implementation of KNetwork in a financial services organisation. Data collected from a sample of 68 professionals from 4 sub-agencies in the organisation was used to test how relevant KNetwork can be developed as an online knowledge repository, to address daily operational issues for problem solving or even decision making.

1.2 Research Questions

The research was descriptive and empirical in nature because the primary data was collected using the survey method through fact finding techniques such as online questionnaires and interviews. The main purpose of this research was to obtain information concerning the current status of the phenomena to describe "what exists" with respect to variables or conditions in a situation and what are the factors perceived to enhance the usage of KNetwork to eventually serve as an online knowledge sharing and learning mechanism to MIDF. The questionnaire survey items and the feedbacks from the focused discussions were utilised to assess the usage and acceptance of KNetwork as a knowledge sharing tool and to answer the following questions:

- What are the critical success factors of enhancing the usage of KNetwork?
- How can KNetwork be sustained to facilitate a knowledge sharing and learning environment in MIDF?

The results demonstrated factors that will be required to accept KNetwork as a collaborative platform to share and acquire explicit and tacit knowledge assets. This study provides insight into acceptance and sustenance of a knowledge repository on the part of professionals in a financial community and the changing roles of a KM Implementation Force in the digital era.

1.3 Significance of the Study

In order to keep abreast of the latest needs and to ensure that community continuously use the KM products and services, there is a need to constantly study community information requirements, engage with them and ensure the products and services provide the ‘cutting edge’ that is critical for organisations to sustain and be relevant to their users. In this respect, identifying the elements for the effective implementation of KNetwork would be an important contribution for organisations themselves wishing to improve their service delivery. The exploration of information, technology and service quality elements of an existing Information Systems Framework, the feedbacks from the survey, and the discussions with users will aim to address the research questions and provide an insight on how best to improve the service delivery of KNetwork. Thus, a study is proposed to explore the implementation of KNetwork in MIDF, and what is required for the KM Task Force to sustain and embrace the implementation challenges and consider leading activities in ‘trailblazing a path towards knowledge management and service efficacy’ in the organisation.

2. Literature Review

2.1 The KM System

The strategic importance of knowledge is widely acknowledged, especially since it is a key asset for employee development, innovation, creativity, and organisational competitiveness (Bolisani, E. & Scarso, E., 2016; Gao, T., Chai, Y., & Liu, Y., 2018). The access to knowledge allows the organisation to generate value from their

intellectual and knowledge-based assets and makes it possible to get the right information into the hands of the appropriate people at the time they need it to make decisions (Sharafat, F., D., 2017). Having discovered that the real value in managing knowledge is in sharing ideas and insights that are not documented and hard to articulate, which is referred to as tacit knowledge, the challenge is sharing and compiling this knowledge in a usable way (Wenger and Snyder, 2002). Some researchers have identified knowledge sharing as a way for organisations to expand intellectually (Dodla, T. R., & Jones, L., 2023). Because knowledge sharing is an essential organizational activity, research on knowledge-sharing types has increased in the 21st century (Ahmad & Karim, 2019). Hence, the area of focus that the authors considered is – how can organisations adopt the knowledge management system (KMS) to capture and share knowledge and implement this system effectively to deliver value to the organisation. MIDF’s KNetwork is a KMS that was developed to host explicit as well as tacit knowledge assets in the form of experiences, with a virtual communities of practice tool (VCoP) to ‘capture and exchange’ these experiences.

2.2 The Virtual Communities of Practice (VCoP)

VCoPs target professionals operating in a knowledge domain who share common problems, interests, or topics; are deliberately created or planned; and have a light “management structure,” which facilitates interpersonal interactions and knowledge exchange (Ettore, B. et al., 2020). Employees in VCoPs rely on group learning in order to accomplish objectives (Frank et al., 2017). These virtual tools occupy a prominent place among KM practices adopted by organisations in several sectors, as education, engineering and especially healthcare (Haas, A., et al., 2020). The information areas such as discussion forums, newsletters, and recommended articles in a VCoP website constitute its knowledge/experience repository. Therefore, CoPs occupy a unique role and are key success factors, which enhance the comprehensive competencies of an organisation (Choi, H. Y. et al., 2020).

2.3 Assessing KNetwork With an Information System (IS) Model

DeLone and McLean (2003) have indicated the success of an information system (IS) can be determined by the use and satisfaction of prior user experience, which are both influenced by the system quality, information quality and service quality of the system. Factors affecting the success of IS technological support, design, and the number of participants and quality of content (Hassan, N. A., 2020; Ali, M., Ju, X. F., 2019). The authors intend to use the D&M (2003) IS success model (specified in Figure 1), as the research framework to assess the perceived benefits of adopting KNetwork in MIDF. Net benefits (success) in this study are defined as the degree of correspondence between perceptions of KNetwork users and KM Implementation staff concerning specific KM services and information provided to management suggesting actions to improve KNetwork.

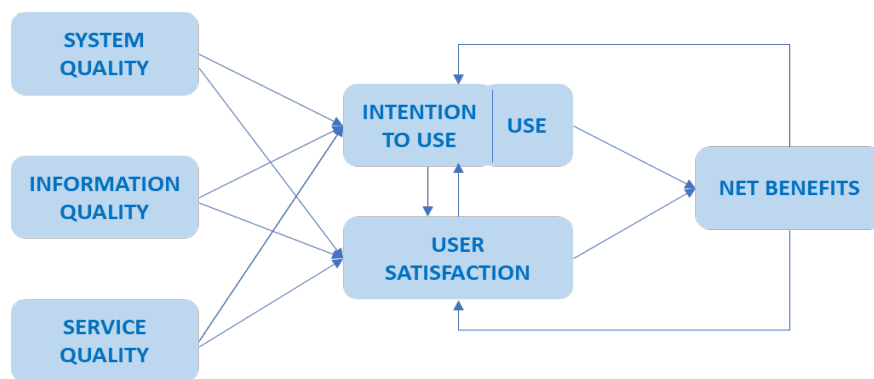


Figure 1: The Factors Used to Assess KNetwork (Adapted from the Updated D&M IS Success Model (2003))

According to D&M (2003), the term “net benefits” is preferred because the original term “impact” may be positive or negative, thus leading to a possible confusion as to whether the results are good or bad. Also, the inclusion of “net” in “net benefits” is important because no outcome is wholly positive, without any negative consequences. Thus, “net benefits” is probably the most accurate descriptor of the final success variable.

The other determinants or factors that are key to the success of the model are:

- Systems quality accesses the desired characteristics of the KMS accessibility, flexibility, reliability, adaptability, and response time are examples of qualities that are valued by the users;

- Service quality will be defined as the overall support delivered by the service provider, regardless of whether this support is delivered by the principal or their selected partners. Its importance is crucial since users are critical stakeholders and poor user support will translate into users accessing alternative sources of knowledge;
- Information quality represents the output of the system in terms of how relevant, understandable, accurate, concise, complete, timely, and useable the content is;
- User satisfaction captures how the user feels about the whole experience with the knowledge repository starting from the module, moving to the features, and finally including the support services that are critical and
- System use, then, is defined as the quantity and manner of utilization of the system. In terms of the system use is assessed.

Net benefits are the most important success measure as they capture the balance of positive and negative impacts of the KMS on the stakeholders.

3. Research Method

This section describes the setting-up of KNetwork and explain the data collection, procedure and data analysis method in MIDF, a financial organisation in Malaysia.

3.1 MIDF Case Study

MIDF Group is a 63 year old financial services provider with 544 employees focussing in three core business areas: investment banking-related services (including debt capital market, corporate finance, underwriting of equities, treasury activities, equity broking services and economic and equity research), development finance promoting the development of the services and Investment sector in Malaysia through the provision of financing for Malaysian enterprises and asset management providing fund management services.

MIDF embarked on knowledge management in January 2022. With a vision of creating a world class knowledge-sharing culture and environment that will continuously contribute to MIDF's success, key strategic initiatives were developed to generate and preserve individual and corporate knowledge, build faster and effective access to relevant knowledge assets and promote collective learning among its community of financiers. A Knowledge Management (KM) Implementation Task Force was established, spearheading a series of knowledge engagement programs with subject matter experts to identify critical processes and determine key knowledge assets. MIDF's newly appointed KM Stewards who were responsible for advocating knowledge generation and dissemination, spearheaded the development of a KMS, "KNetwork", designed to provide web access to the MIDF's explicit knowledge assets comprising of technical reports, research papers and policy guides. With easy and instant access to an online repository, MIDF's financial community was able to view, acquire new knowledge and eventually use KNetwork as a source for online learning.

For a matured institution like MIDF, a major concern is the loss of tacit knowledge when experienced staff gets transferred or leaves the organisation. It was critical to communicate with the community to "capture" work-related problems that the community faced, experiences on how to "fix things" and workarounds that are employed to address them (Scarso et al., 2016). From August 2022, MIDF had begun identifying and validating lessons learned. A standard lessons learned capturing tool was designed by the Lessons Learned Committee and rolled out in a template format to accelerate identification of new practices by the community and making it easily accessible in KNetwork's repository. To increase efficacy, Heads of compliance and audit are currently involved and have begun integrating capturing lessons learned practices into its audit work processes, and infrastructure.

Another key activity in amplifying the lessons learned, is the generation of 'questions' pertaining to the lessons report. These questions are key links into crafting MIDF's VCoP content in the knowledge sharing forums, which was the next scheduled phase of MIDF's KM implementation.

In November 2022, MIDF 'AskMIDF', a knowledge sharing VCoP was developed, adopting the 'Yammer' social network service, used to foster and enable employees' collaboration across departments. With a user-friendly web interface resembling Facebook, users can collaborate, view discussions, or ask a question on a specific topic. MIDF employees can join in a discussion forum, tag key conversations, and also link them with related materials that are available in KNetwork (for example data, case studies, lessons learned reports, etc.). If a user

does not find what is needed in the existing knowledge sources, other members can be requested to help. Any relevant, additional information becomes available through a Yammer conversation (“people to people”) where Q&A are easily exchanged or through the sharing of original contents and materials (“people to contents”) made available on the community (Scarso et al., 2016). It is the responsibility of the AskMIDF committee members and subject matter experts to evaluate and rate the best contents and promote them within the KNetwork knowledge platform. Hence, quality content via experiences (which can be recurring issues in the organisation, or innovative ideas and best practices) of subject matter experts can be voluntarily captured and disseminated to the community.

As of April 2023, there has been 15,300 visits accessing the portal content. To encourage usage of the KNetwork portal, several awareness programs are conducted in a consistent manner to cultivate the habit of using the knowledge repository contents as a valid and relevant source of information or connect with the domain experts to ‘Ask for Help’. These ‘stickiness’ promotional programs with easy links to KNetwork, are made available via KM outreach activities such as ‘Infographic display of knowledge via ‘KM Bites’, Information quizzes via ‘KM Hunt’ and collaboration with KM Practitioners via quarterly ‘KM Exchange’ programs. With roll-out of these initiatives and ‘fun’ created in the usage of KNetwork portal, traffic on that particular day spiked between 250 – 300 daily views. A remuneration model has been crafted and management approval is being sought for provision of quality lessons learned, popular forum discussions and prolific knowledge contributors in KNetwork.

3.2 Data Collection and Analysis

The authors had decided to adopt a case study approach, that fits its descriptive and exploratory goal (Yin, 2003). The authors believed that such an approach was appropriate, as it provides an exploratory and inductive stand that is the foundation for the study; in order to gain a holistic understanding and a deep view of the case in hand. MIDF conducted a series of KNetwork Awareness workshops from April to November 2022. The workshops aimed to introduce KM to all new joiners, MIDF staff who had worked for less than 3 years in MIDF (as of April 2023, there were 208). The workshops covered various topics related to KM, such as the purpose of KM, the benefits of sharing knowledge, and the functionalities of the KNetwork portal that was created in April 2022.

During the workshops, the trainer guided the participants through the KM portal and demonstrated how to use it. The portal was designed to provide a platform for employees to share and access knowledge easily. Participants were encouraged to explore the portal and provide feedback on its functionalities, as well as suggest any additional features they would like to see in the portal. After the KM Awareness workshops were completed, an online survey was conducted to gather feedbacks from the participants. The survey was designed to assess the effectiveness of the KM Awareness workshops and the KM portal. Participants were assured that their identities would be kept confidential, and they would not be identified through their comments. This was to encourage truthful responses from the participants.

The survey instrument covered three main areas. The first section was the demographics profile of the participants, such as their gender, age, job, and agency. The second section focused in assessing the user satisfaction in the usage of KNetwork which covered Information, Service and Technology elements. Participants were asked to rate their level of agreement with various statements related to the survey. The third section of the survey was about recommendations. Participants were asked to provide feedback on KNetwork, suggest improvements, and provide recommendations on how to enhance knowledge sharing and learning in the MIDF.

4. Results

Overall, the KM Awareness workshops, and the KNetwork portal were well-received by the participants. The majority of participants agreed that knowledge sharing and learning are important in the organisation. The survey sample size of 68 respondents encompassing 33% of MIDF's new joiners, responded to the survey after attending one of the 5 KM awareness workshops conducted between April to November 2022. While the sample size may seem small, it has provided valuable insights into the new joiners' perceptions of KM in the organisation. The survey results also revealed that the participants found the KNetwork portal useful and user-friendly. However, some participants suggested that additional features could be added to the portal to improve its functionality. The survey findings also helped identify areas for improvement. MIDF Task Force plans to use these insights to enhance KM initiatives further to promote a knowledge-sharing culture in the organisation.

The quantitative data generated by the questions was plotted on bar charts that used percentage response rates. The feedbacks included 58 opinions and suggestions on how KNetwork can be improved. These responses provided a rich source of views and ideas for the KM Task Force.

4.1 Section A- Demography of Respondents

Table 1: Section A- Demography Profile of Respondents in the KNetwork Awareness Workshops

Demographic Characteristics	Sub-Category	Total	Percentage (%)
Gender	Male	26	38
	Female	42	62
Age	20 - 29	50	74
	30 - 39	13	19
	40 - 49	3	4
	> 50	2	3
Job	Executive Vice President	0	0
	Senior Vice President	0	0
	Vice President/Director	4	6
	Assistant Vice President/Associate Director	10	15
	Senior Associate	5	7
	Associate	38	56
	Non-Executive	0	0
	Others	11	16
Agency	MIDF Inc.	31	46
	MIDF Amanah Investment Bank (MAIB)	32	47
	MIDF Amanah Asset Management (MAAM)	2	3
	Amanah International Finance (AIF)	0	0
	Malaysian Investment Development Finance (DFD)	3	4

4.2 Section B – KNetwork Technology Usage and Benefit

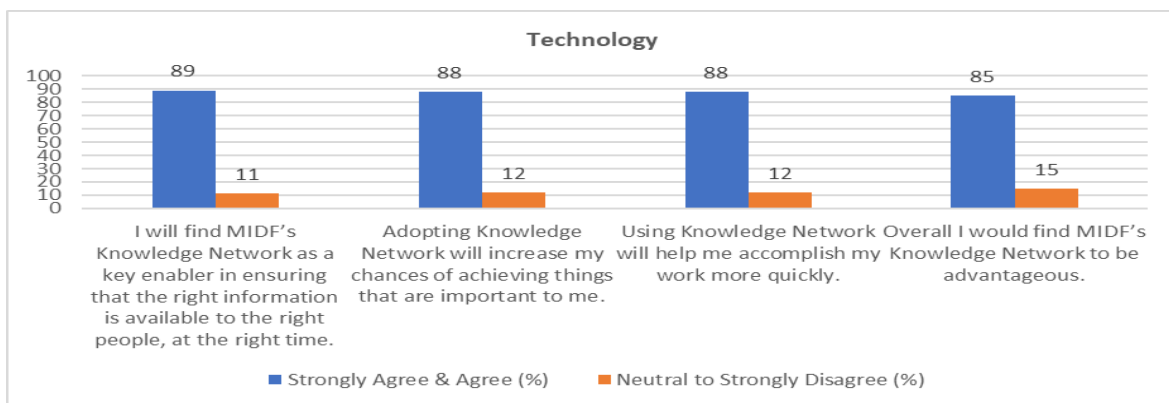


Figure 2: Quality Technology and User Satisfaction

The majority agreed that the KNetwork portal will help employees in getting the right information which will led them to accomplish their work more quickly. 85% agreed that KNetwork will be advantageous to all of them and they will use the portal without any doubt and hesitation.

4.3 Section C – KNetwork Service Element

4.3.1 Provision of Resources and Technical Assistance

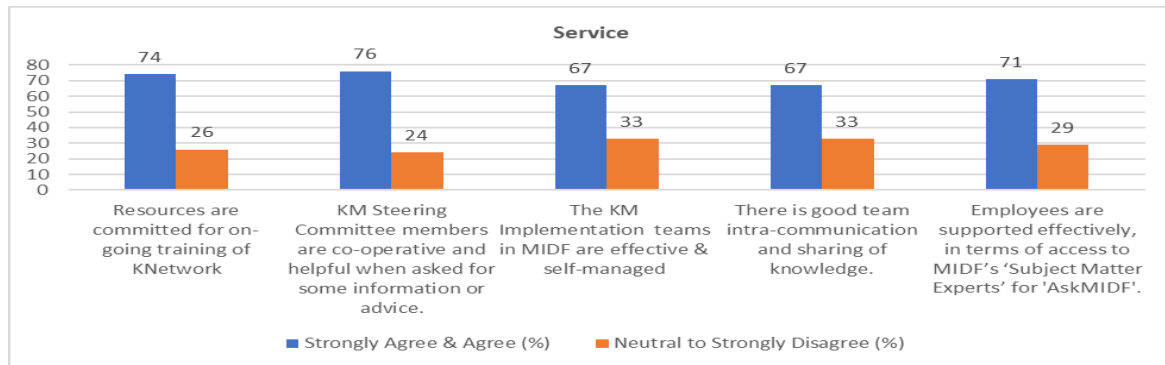


Figure 3: Quality Service for KNetwork Adoption

The respondents were satisfied with the KM Awareness, assistance and service provided by the KM Implementation Team.

4.3.2 Top Management Support for KM

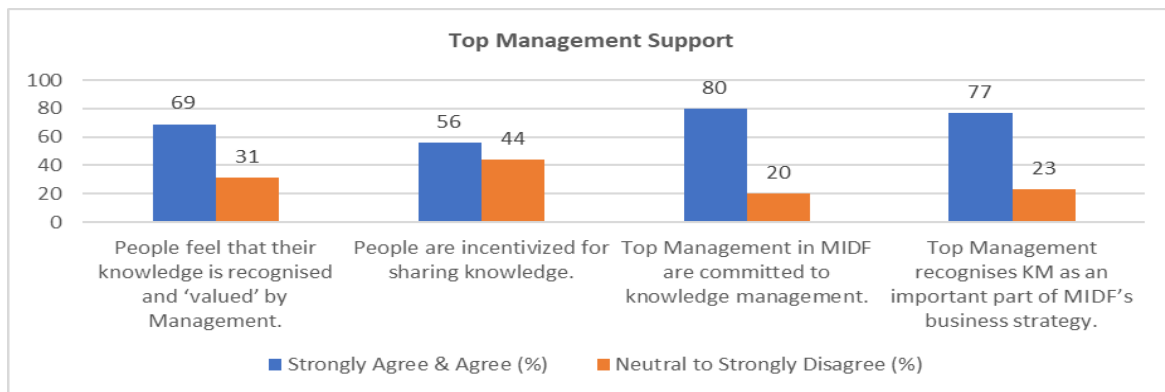
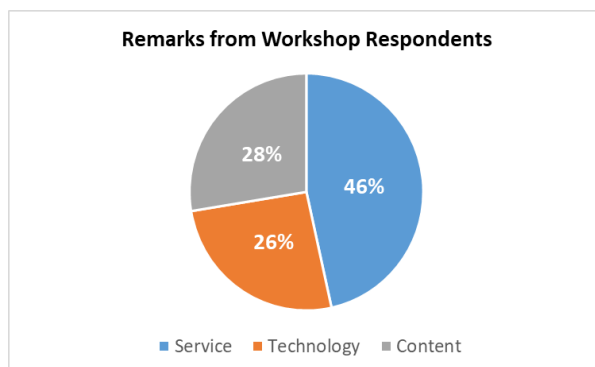


Figure 4: Quality Service with Top Management Support

4.4 Recommendations on how to Enhance Usage of KNetwork



The recommendations covered three main components which are content, services and technology. The majority of participants recommended on enhancing the KNetwork services (46%) which include more KM Awareness workshops, more forums for knowledge sharing and networking. 28% recommended increase of knowledge assets in KNetwork. Being a new portal, these comments were envisaged. 26% suggested better search functions with a more intuitive interface.

Figure 5: KNetwork Recommendations

Overall, the survey feedbacks will help the KM Task Force to identify areas for improvement and develop strategies to promote a knowledge-sharing culture within the organisation.

5. Discussion

This article first explores the critical success factors required to enhance the usage of KM Systems, in particular KNetwork. Findings from participant survey suggested the following 3 factors that can be considered: (1) *Quality systems* – that encompasses a single, easy, and speedy access to KNetwork's information and the

ability to request for assistance via AskMIDF; (2) *Quality content* - which has been validated, relevant and current, with access to subject matter experts and (3) *Quality service* - to KNetwork's community in the form of a facilitating environment that involves top management support (providing resources, time, and budgets), regular promotion programs, and access to KM stewards for immediate assistance.

The above factors conform to the the DeLone & McLean (2003) IS success model. The results of feedbacks from the survey instrument and observations are consolidated and presented, to determine attributes that will need to be considered for the adoption of KNetwork as the knowledge sharing and learning tool (as presented in figure 6).

Key Success Factors : Feedbacks from Participants in the Awareness Workshops

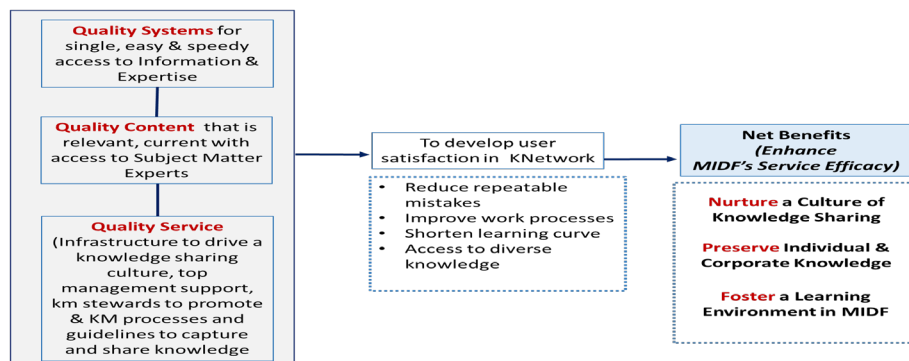


Figure 6: Determinants for Success in Implementing KNetwork

The other area of discussion in this research is to determine how KNetwork can be sustained to facilitate a knowledge sharing and learning environment in MIDF. The findings in this study suggest that KNetwork with its web technological platform, content creation and awareness workshops provided a platform for users to be able to access quality knowledge and connect to subject matter experts with ease. The D&M determinants provided implementers with a guide to determine gaps and mitigate them with strategies and action plans that can enhance KNetwork's user satisfaction.

5.1.1 Enhancing KNetwork's content: The need for relevance and velocity

Based on the results, it can be concluded that the key issues enabling the success of using KNetwork, is to make every-day work easier and faster. As stated above, the general attitude towards KNetwork is positive and it is found useful, that is, the respondents see the value of using KNetwork. The employees' attitude towards sustaining the usage of KNetwork is to improve the velocity and diversity of content and to enhance its quality. Hence, the following strategies are in place: (1) Identifying and generating new lessons learned from multiple approaches; (2) Building a Directory of Experts for MIDF employees to connect and collaborate; (3) Study the questions generated by the lessons learned reports and develop AskMIDF Chats that are relevant to the user and (4) Have regular content creation workshops to enhance explicit knowledge assets.

5.1.2 Building the KNetwork service infrastructure

The suggestions were geared to marketing programs in promoting the value of KNetwork to the community in a systematic and effective manner. The feedbacks suggested on-going face-to-face domain management workshops to validate KNetwork's content, capture and build new content scenarios in KNetwork, regular communication plans to promote the latest lessons learned or viable chats that MIDF community would find relevant. MIDF KM Stewards play a pivotal role in communicating the needs of their users and engaging with the implementation team to manage or exceed user expectations.

5.1.3 Building a reliable and committed KM Task force to support MIDF's KM infrastructure

With positive feedbacks from the community and support from Management and the IT Department, KNetwork functional enhancements are on-going. AI Chatbots are being piloted to explore interest and usage of these tools. Plans for designing and implementing a directory of industry experts for quick and easy engagement in the AskMIDF forums are being explored. The KNetwork development plans and resource management actions are presented in figure 7 below.

KNETWORK ROAD MAP (YR. 2022 – 2024)

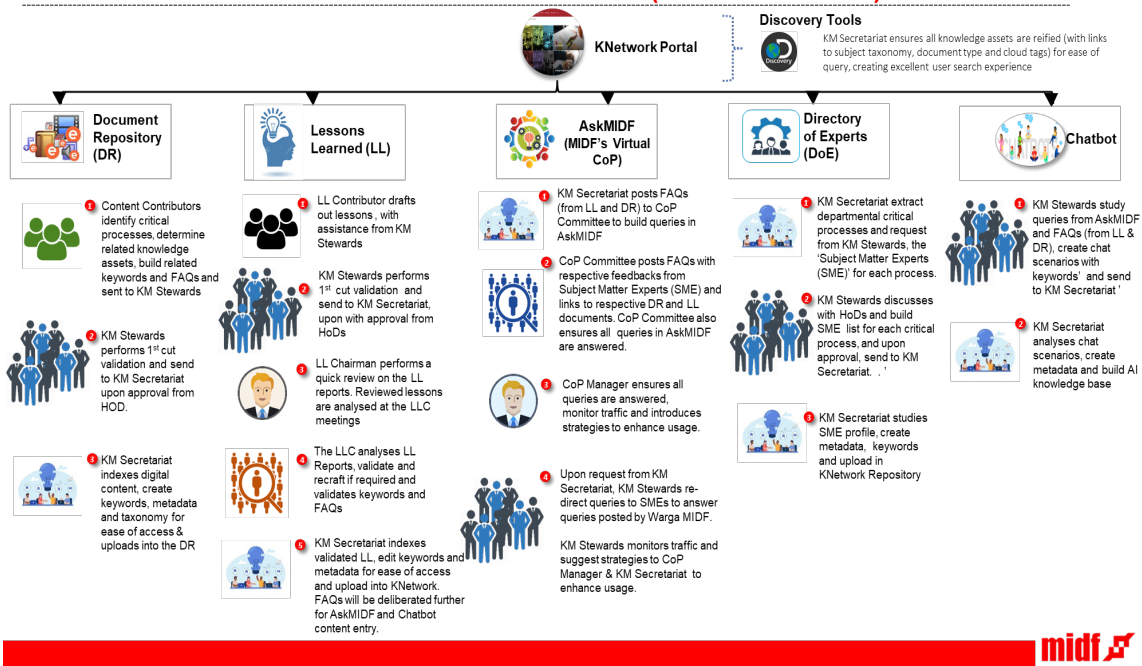


Figure 7: KNetwork Implementation Road Map

At the end of last quarter 2023, an organisation-wide survey will be conducted to ascertain user satisfaction of KNetwork, following by the assessment of the capability of the KM task force. Further research will be made to derive measurement attributes to assess the KNetwork and AskMIDF CoP. Assessing the CoP Maturity (Albert, G. et al., 2019) will be key to the KM Task Force, to understand MIDF’s knowledge sharing behaviour, their information needs and the facilitating conditions that they require to cultivate a habit of engagement.

6. Limitations

This study has few inherent limitations. First, the authors collected our data from one specific organisation in Malaysia. Hence, whether or not the key findings can be generalised to all types of knowledge sharing communities is uncertain. Second, KNetwork being in its coalescing stage, the emphasis was to create awareness, promote the usage and enhance the quality of content. Thus, the study may not be applicable for matured KMS. Third, the IS model that was adapted, limited our focus on specific elements that are widely related to technological characteristics. As such behavioural elements (Venkatesh et al., 2012) were not emphasized at this stage. Future studies could incorporate a more encompassing IS framework studying the determinants in the various stages of the KNetwork’s life span.

7. Conclusion

The aim of this study was to obtain a clearer picture on the determinants of a successful knowledge sharing community. As KNetwork is in its coalescing stage, building a sustenance program will be a constant challenge for managers who are in charge of enhancing the community engagement and facilitating an infrastructure for KM to thrive. This study brings a possible contribution to the KMS literature by providing insight to the determinants that support to the success of virtual knowledge sharing communities in cultivating an online learning environment.

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