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VIRTUAL-MELAKA INTERNATIONAL INTELLECTUAL EXPOSITION

ROAD TO COMMERCIALISATION

V-MIEX BOOK



V - MIIEX BOOK

'ROAD TO COMMERCIALISATION'

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FOREWORD

ASSOC. PROF TS. DR MOHD RASDI ZAINI
Rector
Universiti Teknologi MARA (UiTM) Cawangan Melaka



Welcome to Virtual-Melaka International Intellectual Exposition 2022 (V-MIIEEX 2022). It is an honour for me on behalf of UiTM Melaka Branch to thank all of you for joining the programme and we are proud to inform you that this is the 12th year consecutively, UiTM Melaka Branch is organizing this exposition.

V-MIIEEX 2022 is a platform to improve the commercialization collaboration among industries and communities and at the same time, we also give the opportunity to academicians and students to share ideas and increase their potential innovation products with the industries and communities through their projects. This exposition also serves as a platform to cultivate and upload the nation's innovation culture by presenting new ideas and research by young people, especially from academia, universities, college, high schools, and primary school students.

The economy and development of the country faced a challenging phase in 2021 due to the Covid-19 pandemic. We faced changes in business, education, society, and lifestyle. However, the pandemic proved to be a blessing in disguise as it somehow gave people ideas which would be beneficial to improve their lifestyle and solve problems that might occur in the future. Besides, the new digital landscape also inspires more innovation and new ideas that contribute to various activities such as business and industries. As a university that encourages the "Research, Innovation and Commercialization", this exhibition is organized to encourage more commercialization of products that are beneficial to scholars, industries, and communities to tackle such issues to improve our present and future life.

Since 2009, UiTM Melaka Branch has successfully become the organizer for this innovation exposition. We are not only successful in organizing the exposition, but I would proudly say that we have also successfully embarked on commercialized products. With the number of participants for this year's exhibition, we believe that more commercialized products will be produced in line with the theme for this year, "Road to Commercialisation".

This exposition would never happen without dedication, teamwork, and commitment. A round of applause should be given to the committee teams as the backbone of this exposition. Their hard work, effort, and time made this exposition possible.

Finally, I would like to conclude this brief remark by thanking all the participants and stakeholders for joining the exposition, we hope that this collaboration never ends here.

Thank you.



DR. NUR HAYATI BINTI ABD RAHMAN
Deputy Rector Research & Industrial Linkages
Universiti Teknologi MARA (UiTM) Cawangan Melaka

It is a great pleasure to welcome all the participants and presenters to the Virtual Melaka International Intellectual Exposition (VMIIEX 22). I am delighted that through this periodic event, we managed to bring together scholars and professionals from various fields to engage through this virtual platform where ideas and breakthrough are discovered and leveraged for commercialization potential.

Since 2009 UiTM Cawangan Melaka has held twelve Invention and Innovation Design competitions and this year we are very honoured to have the second year of VMIIEX organized in digital platform. This has proven that despite the global challenges due to the recent pandemic, it is never an issue for UiTM Melaka to continuously organize this yearly prestigious event and to support the ministry's aspiration in leveraging creativity and innovation in the new norm.

VMIIEX 22 is organized with no sole objectives of accomplishing the University's KPI but instead we are determined to make this programme as the place to help heighten commercialization collaboration in research and innovation with the industry and community through joint exhibitions from various external organizations.

Our aspiration is to also provide exposure and opportunities to academic staff as well as students from public and private universities to engage in direct excellent scholarly activities with the industry and community through activities that can be measured and assessed. As for the Research and Industrial Linkages Office of UiTM Melaka, this exhibition is seen as the platform that can encourage active collaboration and knowledge transfer with industries; objectively to support various activities that will benefit all stakeholders from the various government agencies, local and international universities, industries and communities.

Through the theme of "Road to Commercialization" this year, V-MIIEX 22 is committed to have this event as a boulevard to inspire and cultivate creativity and innovation to the numerous levels of inventors through exposure on latest technologies, astonishing ideas and creative designs with great potential to be commercialized. For this year, we proudly introduce a special category which is the "Endemic Challenge" as the provision to the government of Malaysia's goal of moving towards the endemic.

To ensure that the competing products in this exhibition is not exclusively for the purpose of competition, V-MIIEX 22 is dedicated for the commercialization of highly potential innovation products, which is attained through its active collaboration with tailored needs industries. The commercialization effort was not for income generation purpose only but it aimed to spearhead the development of quality products in line with industrial needs and community benefit.

Therefore, it is a great honour for me on behalf of the Research and Industrial Linkages Office as well as the organizing committee to have all participants in this competition and I would like to express my highest gratitude especially to the Rector of UiTM Melaka and all strategic partners and sponsors for supporting the event.

To finish, I sincerely wish VMIIEX 22 a remarkable success. I believe that this will not be the only collaboration between UiTM Melaka and the respective partners and linkages, but a beginning of a long and fruitful cooperation in future.

Thank you very much.

road to commercialisation...

WAN HASMAT WAN HASAN
Project Director V-MIIEEX 2022
Universiti Teknologi MARA (UiTM) Cawangan Melaka



Assalamualaikum and Warmest Greetings.

It gives me an enormous pleasure, on behalf of the organizing committee to welcome all participants and presenters to the Virtual -Melaka International Intellectual Exposition 2022 (VMIIEX '22) with the theme "Road to Commercialisation". We are honoured and glad to welcome all participants to this biennial event.

This is the second time that we have organized this biennial event virtually. V-MIIEEX 22 is an innovation competition, in which, innovation products, ideas and systems related to various science and technological fields are exhibited as a solution for the presented problems.

V-MIIEEX22 expectantly will be a platform that gathers experts from academies, scientists, and researchers, locally and internationally, to contribute towards the growth of scientific and technological knowledge in each participant's specialisation and expertise.

The competition also serves as a platform to give fresh exposure to the various level of inventors, as well as to encourage the culture of innovation design focused on latest technologies and related to new norms technologies and inventions due to COVID-19.

V-MIIEEX 22 is also hoped to be an avenue for gathering and disseminating the latest knowledge on ideas and acquisition of innovation among the participants. It is hoped that the competition will be able to open the mind of the participants towards latest technologies and design. It is also in line with the government's aspiration to encourage innovation activities in Malaysia.

As a final note, I would like to congratulate my fellow committee members for their tremendous effort, which have been critical to the event's success. In addition, I would like to thank our co-organizer, event sponsors and supporters. Optimistically, we wish that all new knowledge that is discovered, invented, or innovated will drive towards our future sustainability.

Thank you.

ABOUT V-MIIEEX

The world after COVID-19 is unlikely to return to the world that was. Despite the challenging pace during the pandemic, the strong rebound is expecting in this exciting year 2022. Malaysia is welcoming the great prospects ahead with positive impact on the country's economy and development. Hence, the hope for greater opportunities motivates for more creative thinkers to come up with innovative ideas that can be put forward to be harnessed to overcome similar problems in the future. V-MIIEEx 2022 is one of these platforms which contribute relevant ideas that could help communities of all walks of life cope with this pandemic.

UiTM has identified research, innovation, and commercialization to be among the core components and strategic effort towards becoming a well-known and prominent university. Aside from realizing this goal, with these components and efforts, fostering the development of knowledge, generating financial stability of the university, and producing knowledgeable academicians are also potentially achievable.

By having invention and innovation competition yearly, UiTM Cawangan Melaka is confident that it could further enhance creative and innovative abilities among staff and students. In support of the government notion which upholds the importance of innovation, UiTM Cawangan Melaka has taken the initiative of organising the Virtual Melaka International Intellectual Exposition (V-MIIEEx).

In instigating and nurturing the continuous culture of inventing and innovating, this event is an ideal platform for lecturers, administrative staff, students, and the public to showcase and commercialize their products or prototypes as well as novel ideas. The first IID which was held nationally in UiTM Cawangan Melaka in 2009, has successfully gathered and displayed more than 37 inventions and innovations. Accordingly, to continue this strong passion towards inventing and innovating, the IID competition should be continued and celebrated.

With that, the Division of Research and Industrial Linkages will be organising its 12th IID competition, the Virtual - Melaka International Intellectual Exposition (V-MIIEEx 2022) with the theme, 'Road To Commercialisation'. V-MIIEEx 2022 hopes to welcome 200 competing products to be showcased and commercialized, at the same time, attract attention of related and matching industry.

Objectives

1. Encourage and instill passion towards inventing and innovating among UiTM Cawangan Melaka staff, students and academicians of local and international higher education institutions;
2. Highlight distinguished talents of skillful inventors and exhibit intellectual products, inventions and innovations among local and private tertiary institutions, government and private agencies, including international participants;
3. Become an effective Business Matching platform for participating research products, matching industries and partnering government agencies;
4. Recognise, inspire and promote invention and innovation products to be patented and commercialized;
5. Increase passion towards inventing and innovating through research and boost interests of government and non-government agencies to obtain consultancy services from a line up experts of higher education institutions and UiTM Cawangan Melaka.

Determining Members' Trust in Cooperative: Application of Value Co-creation Behavioural Scale

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Abstract

Recently there are several numbers of research on value co-creation behaviour that continuously grow in the service marketing literatures. Customer is always a co-creator of value and they play an important role as an active player in value co-creation. In a cooperative context, member of a cooperative plays an important role to ensure the co-creation of value can be strategized. On the other hand, it will help both cooperative and member as in a cooperative setting, the cooperative's business as a service provider is owned by their respective members. Therefore, it requires active participation among members in the service delivery and also more extra roles in economic and social activity in cooperatives. The aim of this study is to examine the relationship between value co-creation behaviour and their trust. Measurement of value co-creation behaviour are consisting of four (4) dimensions, namely information seeking, information sharing, responsible behaviour and personal interaction. The minimum sample size was determined through G-Power analysis. By appropriating the quantitative approach, 395 copies were collected and deemed usable after data cleaning procedure. Partial least squares structural equation modelling was employed to test the hypotheses empirically. Results from this study can be utilized by related Ministry and cooperative sector to determine their members' trust by utilizing the cooperative value co-creation behaviour scale which has been established from this study. This study contributes to the knowledge and practice in the cooperative industry by underscoring the importance of value co-creation behaviour in determining members' trust and policy making agenda.

Keywords: Value co-creation behaviour, Trust, Service Dominant Logic Theory, Social Exchange Theory

1. INTRODUCTION

The central to the economic growth of the country entails the cooperative movement as a business organisation to provide services to their members and public. As stated in the national cooperative policy, cooperative sector is the engine growth of the economy as Malaysia is heading towards becoming an entrepreneurial and a high-income country by 2030. However, to date, there has been very little research focusing on cooperative industry in the service function and activities. Considering the relevance and importance placed by many government agencies, such as Malaysian Co-operative Societies Commission (SKM), Co-operative Institute of Malaysia (IKMa), National Co-operative Movement of Malaysia (ANGKASA) toward nation-building through policies, economic growth, employment, business entrepreneurship, it is crucial for the researcher to understand the co-creation of value from the members' perspectives in the cooperatives. Therefore, the strength of cooperative depends on

its ability to increase the participation of members and maintain the trust and loyalty towards achieving common goal of the cooperative. Therefore, value co-creation acts as a key driver to build trust among their members which contributes to the survival of the cooperatives in long term.

As a democratically controlled organization and a members'-based organization, members of a cooperative play important roles in service co-creation as to achieve their economic and social goals. Despite its important roles, the service marketing literatures gives limited attention on the area of customer participation as a value co-creation behaviour construct (Fowler, 2013). The issue being neglected is due to the inadequate of conceptual understanding, the reasons why such behaviours occurs and the impact towards the firm. There is also an extreme lack of study done in the cooperative context to date to understand co-creation behaviour towards trust among members (Balaji, 2014)

The present study focuses on value co-creation behaviour from the cooperative members' perspective in which they representing the customer point of view. This study examines the value co-creation behaviour dimensions toward cooperative members' trust. Measurement of value co-creation behaviour are consisting of four (4) dimensions, namely information seeking, information sharing, responsible behaviour and personal interaction. Trust among members is a major issue to be addressed in the unique organisation such as cooperatives. Members' trust is a main component to ensure the cooperative business remain competitive and feasible. Recognizing the shortcomings of previous findings in explaining the behavioural outcomes and knowing the Malaysia is culturally different from western organisations, the application of the value co-creation dimensions in a Malaysian-based organisation and how they affect trust, satisfaction, and loyalty remain largely unknown. For theory enhancement, this study will widen the existing knowledge of value co-creation by extending the application of the Service-Dominant Logic (S-D Logic) and Social Exchange Theory perspective.

2. OBJECTIVE

As little is known about value co-creation behaviour dimensions in determining members' trust in cooperative, this need to be addressed prior to developing the model. The general objective of the study is to propose a value co-creation behaviour model that articulates the antecedents and consequences between variables in the context of cooperative environment. Trust is the consequent construct, while value co-creation behaviour which is formed by four (4) dimensions is the focal construct of this study. The present study aims to examine the relationship between value co-creation behaviour and trust among member of the cooperatives. In addition, the main predictor of value co-creation behaviour dimensions that determine members' trust will also be identified.

3. NOVELTY & INVENTIVENESS

This study has provided additional support to understand the consequences of value co-creation behaviour. When incorporating the findings into the value co-creation model, the study contributes a recent perspective of knowledge to the existing literature on understanding value co-creation phenomenon further. An application of Social Exchange Theory through the concept of trust has so far been neglected in explaining the outcomes of value co-creation in cooperatives. Most studies look at value co-creation antecedents in the literatures. The integration between Service Dominant Logic Theory and Social Exchange Theory has explained the model and phenomenon of the study in depth. It is a new study in the nature of cooperative's business and environment, which is controlled and participated by members,

thus, this principle is seen relevant. The propose model and cooperative value co-creation behavioral scale can be used to predict relational outcomes.

4. PRACTICALITY & USEFULNESS

The contribution of the current findings in developing a proposed conceptual framework of value co-creation in cooperative service firms' will provide a better understanding of conceptual and practical insight of the value co-creation behaviour model and its application. Since the research framework explains how co-creation behaviour is related to the members' trust, it could be a useful guide to the practitioners to enhance their marketing strategy and practices. In service organisation such as cooperative where high contact services occur between members and cooperatives, the management should understand that members as the customers of the cooperative are a major player in the overall value creation process.

The results of the study should be disseminated and shared with related ministry such as Ministry of Entrepreneur Development and Co-operatives, cooperative training and development agencies such as Malaysian Co-operative Societies Commission (SKM), Co-operative Institute of Malaysia (IKMa), National Co-operative Movement of Malaysia (ANGKASA) to improve members' trust using value co-creation behaviour scale in Malaysia.

5. CONCLUSION

This study makes an important contribution by providing insights about the role of co-creation behaviour in influencing trust among consumers. By empirically examining the relationship between co-creation behaviour dimensions and members' trust, this study extends the current knowledge of co-creation behaviour in relationship marketing. Findings from this study confirms that S-D Logic and Social Exchange Theories underpinning the phenomenon of the present study. Customer who holds more co-creation behaviour would lead to higher relationship quality. Completion of this study marks an empirical study on developing research model of value co-creation behaviour that aims to contribute towards building cooperative members' trust by utilizing value co-creation behavioural scale.

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