

RURAL REVITALIZATION THROUGH E-COMMERCE WITHIN  
COMMUNITY INTERNET CENTRE IN KAMPUNG UBAI, KUANTAN

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## **DEDICATION**

This thesis is dedicated to my beloved parents who always loved me unconditionally and have taught me to work hard to achieve my dream. It is also dedicated to my dearest husband for constantly supporting me to pursue my study. Also not to forget to my supervisor who helped and guided me to complete my thesis successfully.

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## **ABSTRACT**

One of the initiatives that were implemented and developed under the Malaysian Communication & Multimedia Malaysia (MCMC) Universal Services Provision (USP) fund was Community Internet Centre, or known as Pusat Ekonomi Keluarga Digital Malaysia (PEDi). The ultimate goal of PEDi is to provide internet access to the community to empower the community and increase the socioeconomic of the community through ICT adoption. PEDi undertook an extensive effort to assist rural communities in venturing into e-commerce. The feedback from grassroots PEDi Kampung Ubai, Kuantan, there is a lack of participation from their communities on e-commerce programmes. Although the majority of the population in Kampung Ubai are self-employed (small businesses and farmers) in the low-income area, only a few have adopted e-commerce. A minima number of communities attended e-commerce programmes at PEDi Kampung Ubai in 2020. This, due to communities being unclear about e-commerce potential benefits, thus the e-commerce programmes held by PEDi did not receive a good response from communities. Therefore, the purpose of this action research is to determine the issues that are facilitating and hindering its acceptance and understand the constraints that discourage the community to use ecommerce by using the UTAUT model. A mixed method approach, qualitative and quantitative was applied to this research to 26 respondents. The interventions through this study were carried out with the aims to increase the communities' awareness of potential e-commerce benefits and improve the e-commerce adoption of communities. Thematic analysis and the Social Sciences Statistical Package (SPSS) were used to interpret and analyse the findings. The t-test analysis result shows that the intervention conducted is significant. This research will be useful for policy makers or relevant stakeholders as a guide to develop a strategic plan of e-commerce programmes for rural communities through PEDi.

## ABSTRAK

Salah satu inisiatif yang telah dilaksanakan dan dibangunkan di bawah Program Pemberian Perkhidmatan Sejangat (PPS) Suruhanjaya Komunikasi dan Multimedia Malaysia (MCMC) ialah Pusat Ekonomi Keluarga Digital Malaysia (PEDi). Matlamat utama PEDi adalah untuk menyediakan akses internet kepada komuniti, memperkasakan komuniti serta meningkatkan sosio-ekonomi masyarakat melalui penggunaan ICT. PEDi menjalankan usaha yang meluas di dalam membantu komuniti di luar bandar untuk menceburi bidang e-dagang. Maklumbalas daripada akar umbi pihak PEDi Kampung Ubai, Kuantan, penyertaan komuniti dalam program e-dagang yang dianjurkan mereka adalah sangat tidak memberansangkan. Walaupun majoriti penduduk di Kampung Ubai berkerja sendiri (Peniaga kecil dan petani) di kawasan berpendapatan rendah, hanya segelintir yang mempraktikkan e-dagang dalam perkerjaan mereka. Pada tahun 2020, hanya sebilangan kecil sahaja komuniti yang telah menghadiri program e-dagang di PEDi Kampung Ubai. Ini disebabkan oleh masyarakat kurang jelas tentang potensi manfaat yang ditawarkan oleh e-dagang. Justeru, tujuan kajian ini adalah untuk mengenalpasti isu atau faktor yang menghalang komuniti daripada penerimaan e-dagang serta memahami kekangan yang dihadapi komuniti dengan menggunakan model UTAUT. Pendekatan kaedah kajian secara kualitatif dan kuantitatif digunakan dalam kajian ini kepada sejumlah 26 orang responden. Intervensi melalui kajian ini telah dijalankan bertujuan untuk meningkatkan kesedaran komuniti tentang potensi manfaat e-dagang dan meningkatkan penggunaan e-dagang mereka. Analisis tematik dan Pakej Statistik untuk Sains Sosial (SPSS) telah digunakan untuk mentafsir dan menganalisa dapatan kajian. Hasil analisis menunjukkan bahawa intervensi yang dijalankan adalah signifikan. Penyelidikan ini boleh digunakan oleh pengubal dasar atau pihak berkepentingan berkaitan sebagai panduan untuk membangunkan pelan strategik program e-dagang bagi masyarakat luar bandar melalui pelaksanaan di PEDi

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## **LIST OF ABBREVIATIONS**

MCMC	-	Malaysian Communications and Multimedia Commission
PEDi	-	Pusat Ekonomi Digital Keluarga Malaysia
PPR	-	Projek Perumahan Rakyat
SPM	-	Sijil Pelajaran Malaysia

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# CHAPTER 1

## INTRODUCTION

### 1.1 Introduction

Electronic commerce or e-commerce is defined as a practice of using internet services for the purpose of buying and selling goods and services or collection of commercial transactions conducted electronically on the Internet. The e-commerce business transactions happen as business-to-business, business-to-consumer, consumer-to-business and consumer-to-consumer. It is a type of business model that ensures firm or an individual to conduct business over an electronic network like the Internet. In Malaysia, the e-commerce market was booming, driven by the expanding broadband penetration, increasing number of internet users and rising in disposable incomes of its citizen. According to the survey by MCMC, as of December 2018, the internet users in Malaysia was 28.7 million with broadband penetration was 131.7% per 100 inhabitant. The internet is a powerful platform, which has revolutionized the way we do things. More and more people are increasingly using the internet to search for products and services. With the advancement in the field of information technology and the advent of affordable smartphones, more number of people from all over the world are connected to the internet than ever before. Thus, e-commerce has become a huge potential market for business.

At present, e-commerce is not only essential for the country's economic development but also a potential economic activity for community development in the rural areas. As e-commerce can be a platform for the rapid development of community in the rural area, it will revitalize rural areas as well as bridge the gap between urban and rural. The authorities such as governments are strongly promoting the implementation of practices that promise substantial productivity increases and

increased business opportunities. The e-commerce is important for the rural community as it assists to expedite new market opportunities and offer productivity improvements. To simplify, e-commerce is a new impetus for rural economic development and rural revitalization.

However, despite the many potential benefits offered by e-commerce, the rural has been slow to embrace the new business practices. The insignificant number of rural communities adopting e-commerce might be due to lack of understanding of the process of integrating e-commerce into their life or lack of awareness on potential benefits of e-commerce. Therefore, by referring to the community within Kampung Ubai Community Internet Centre, Kuantan, Pahang, this study is intended to explore how the e-commerce adoption of rural communities over there can be improved by increasing the awareness, knowledge and skill of the community about e-commerce.

This chapter will cover the sub-chapter that includes the company's background, problematic situations that occur in the organization, research questions and objectives, the researcher's role, ethics, the theoretical and practical importance of the proposed research, and term definitions.

## **1.2 Information about the Case Company**

Malaysian Communication and Multimedia Malaysia (MCMC) through the Universal Services Provision (USP) fund, has implemented the Community Internet Centre or Pusat Ekonomi Keluarga Digital Malaysia (PEDi) with the ultimate goal of bridging the digital divide between urban and rural communities. The PEDi has been built since 2007 in the underserved areas such as Felda settlements, villages and Projek Perumahan Rakyat (PPR). To date, there are 873 PEDi in operation nationwide. Apparently, the PEDi programme is an initiative to develop a programme that serves

as catalyst for a positive social and economic change to the community. Besides providing fast internet access, the PEDi would also provide training to equip the local community with new digital skills including e-commerce. At present, out of 873, there are 108 PEDi in state of Pahang, and one of them located in Kampung Ubai, Kuantan

### **1.2.1 Community Internet Centre Pusat Ekonomi Digital Keluarga Malaysia (PEDi)**

PEDi, formerly known as the Pusat Internet Komuniti, is equipped with computers and connected to internet broadband access. Through the PEDi, the underserved groups within the communities take full advantage of ICT facilities and utilized to its full potential. To support rural communities improving their socio-economic status, PEDi provides free education and training on ICT and entrepreneurship. PEDi is an ideal environment to conduct structured training on improving the community's capabilities and ICT skills. Among the training provided at PEDi are basic introduction of ICT, e-government, e-commerce entrepreneurship, e-learning, desktop publishing such as Microsoft Office, animation, and video production. To date, PEDi has implemented numerous training programmes for the local community to enhance skills, knowledge and competitiveness of the participants such as ICT programmes, e-Learning, entrepreneurship & E-Commerce, Internet of Things (IOT) and community engagement programmes. From the date of its operating until present, PEDi successfully produced numerous success stories of the local community in terms of ICT literacy, digital entrepreneurs, who have been guided by PEDi for online business to penetrate a wider market and increase their sales and income.

### **1.2.2 PEDi Kampung Ubai and e-Commerce Programmes**

PEDi Kampung Ubai opened in 2010 and it's equipped with 20 computers, high-speed internet access, surfing area and training room with two personnel. To

name but a few, its functions and roles are as change agent for community development, centre for community relations and networking, centre for and e-commerce entrepreneurship, centre for Community learning and creativity and Innovation. Apart from internet services, training, ICT courses and e-commerce opportunities provided, PEDi Kampung Ubai has put an effort to upskill and innovate their local community as well as strengthen their local economy. On e-commerce, PEDi focuses on imparting a spirit of entrepreneurship by providing opportunities for the communities to learn about new ways of doing business over the internet. At present, there are about 52 of the local communities were trained by PEDi Kampung Ubai for digital entrepreneurship. To conduct and promote interest in ICT, training programmes and ICT related events to the community, PEDi takes an active role to promote and attract the community and design the appropriate programmes which covers all from children, women, adults, entrepreneurs and senior citizens. Among the contributions of PEDi Kampung Ubai in increasing their local community socio-economic status is successfully trained about 52 of local communities to be digital entrepreneurs to date. However, the number of 52 digital entrepreneurs are not sufficient if compared to 90 % of communities within the PEDi are self-employed doing small business. Supposedly, many more of their communities should grab the opportunity to integrate e-commerce for online business.

### **1.2.3 Study Area Profile**

Kampung Ubai is located in district of Kuantan, Pahang State. The villagers are mostly traditional farmers, the settlement used to be covered with secondary forest, but now being cleared with farming activities. The total population in Ubai is estimated around 1050 people covers smaller kampong units known Kampung Ubai as main village and several smaller neighbourhood units known as Kampung Pulau Rusa, Kampung Semangat, Kampung Cherok Paloh, Kampung Hjirah, and Kampung Sepat. There are several facilities available in Kampung Ubai such as mosque, Internet centre, pre-school and primary school and community hall. Although majorities of villagers in Kampung ubai 90% are self-employed which depending on cultivation activities for

the main income but there are also some livelihoods of the villagers depending on varieties of multi-skills jobs which acquired by them such as fishing, bakery, food based, repairing works, carpenter and construction skill. Nevertheless, the villagers are still practicing in the traditional way including in doing their business, for example the watermelon farmer here who are generally operating small business and small producers, selling the watermelons to the middlemen and have to accept the middlemen prices. According to the community here, the e-commerce practices of the local people are still at an infant stage.

### **1.3 Problematic Situation and Problem Formulation**

The MCMC role is to support the government's initiative for the communication and multimedia sector. One of the government's recent initiatives that was announced by the Prime Minister on 19 February 2021 is Malaysia Digital Economy Blueprint, a part of MyDigital initiative to “transform Malaysia into a digitally-driven, high income nation and a regional leader in digital economy.” Amongst the planning outlined under this initiative is aiming to open 500,000 job opportunities in the digital economy and encourage 875,000 micro, small and medium businesses to fully adopt e-commerce. MCMC in this position is to not only promote the Malaysian Digital economy by digital infrastructure connectivity but also utilize the community internet center (PEDi) to empower the rural communities to become digital entrepreneurs by adopting e-commerce. By e-commerce, rural communities would have an opportunity to expand their local product to a larger domestic market and even international market.

Therefore, the role of PEDi is to promote interest to the community on the e-commerce benefit and help them to increase income and expand to online business. PEDi as the change agent of rural communities to use e-commerce and support the rapid growth of the digital economy. To ensure PEDi plays its active role in supporting the communities to adopt e-commerce, MCMC has set three KPIs this year for PEDi

to achieve and produce the expected result. The set KPIs required PEDi to create the new successful new entrepreneurs developed via the support of PEDi, to increase the income of PEDi communities and new jobs created in local communities.

However, the intention of MCMC to empower the PEDi to become a digital transformation center and focal point of economic activities of the community would not be smooth if PEDi itself faces challenges of implementing it. MCMC should study what are the challenges faced by PEDi to support the set KPIs and MCMC's plan, otherwise it will not be smooth execution and disrupted. The Fishbone diagram in Figure 1.1 below shows the factors that affect the issue of e-commerce adoption among the rural communities. The factors that lead to low e-commerce adoption of communities within the internet center of the case study, Kampung Ubai.

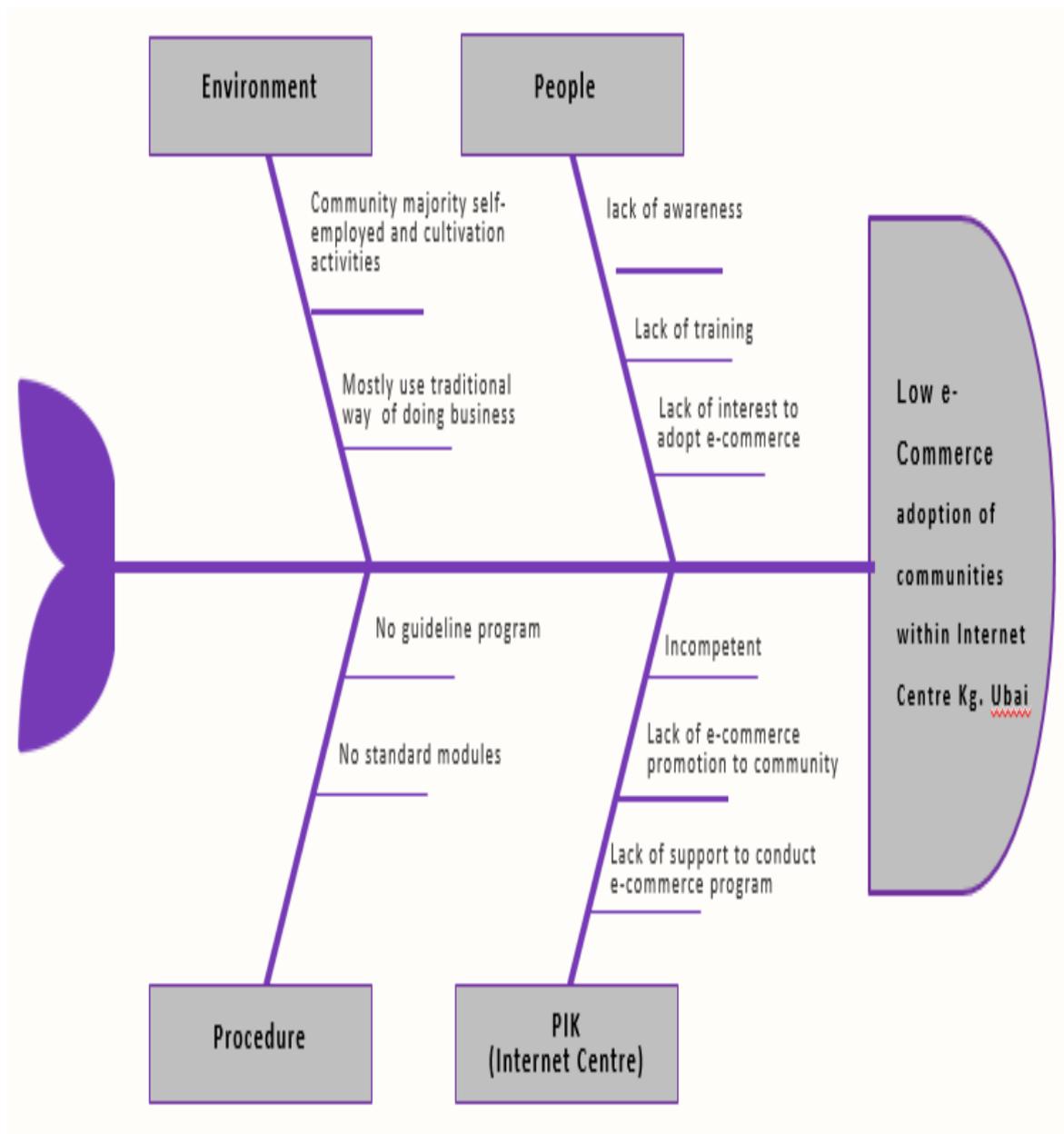


Figure 1.1: The Fishbone diagram

The factor and challenges faced by PEDi Kampung Ubai to support improving their community's socio-economic status are environment, people, procedure and the PEDi itself and it must be consistency. First, on the procedure work process, PEDi do not have a proper guidelines and modules on e-commerce programmes. While, the majority of villagers in Kampung Ubai are self-employed with small businesses and cultivation activities in the low- income area. Their local leader has requested to PEDi to teach the community about e-commerce but without a proper guideline and modules

PEDi will be incapable to effectively train their community. MCMC should support PEDi by providing a proper guideline and modules for PEDi to accelerate the e-commerce programme.

Next, it is a challenge to increase income via digital adoption among the communities lack of e-commerce training when a very small number of communities turn up to the e-commerce training program at PEDi. In 2020 only 4 participants from the communities attended the e-commerce programmes conducted at PEDi Kampung Ubai. The low adoption rate could be due to insufficient awareness on the e-commerce benefits and opportunities among the community or lack of e-promotion by PEDi. There is much that PEDi can be done for their communities but if the communities themselves are unable to understand the important insight into ecommerce and not showing interest the effort to help the communities especially those B40 will struggle. It is important to note that to empower the community with e-commerce adoption until it enable make a significant impact in increasing the quality of life, the entire population must be practically accessible to the e-commerce.

With regards to e-commerce, since this sector is blooming amid the covid-19 pandemic, the e-commerce adoption among the rural communities must accelerate. According to Almousa (2013), e-commerce is probably a vital key to success and growth in the competitive environment. Although the communities in Kampung Ubai are still operating their small businesses, the rise in Covid-19 has limited their movement and disrupted their business. Thus, PEDi needs to undertake an extensive effort to assist the communities venturing into e-commerce, forcing them to go online. However, PEDi consistency in promoting the e-commerce programmes is found not encouraging. The lack of e-commerce awareness promotion lead to incompetent of PEDi in to support their community to venture into e-commerce. It is undeniable that e-commerce will completely change the traditional way of doing business. Rural communities should seize the opportunity to integrate e-commerce in their lives as e-commerce will increase profits, change their quality of life and increase effectiveness.

The rural community's perception about e-commerce must be improved for them to attempt, anticipate and take advantage of e-commerce. While, the challenges of PEDi in promoting and conducting the e-commerce programmes at PEDi must be aided for PEDi to be more competent to support improving their community socio-economic status.

## **1.4 Research Questions and Research Objectives**

### **1.4.1 Research Questions**

1. What are the issues with the e-commerce adoption among the community in Kampung Ubai?
2. What intervention should be implemented to improve the e-commerce adoption among the community in Kampung Ubai?
3. What is the impact of the intervention implemented?

### **1.4.2 Research Objectives**

1. To determine issue of e-commerce adoption among the community in Kampung Ubai
2. To propose the appropriate intervention to improve the e-commerce adoption and awareness among the community in Kampung Ubai
3. To measure the effectiveness of the proposed intervention to the community of PEDi Kampung Ubai .

## **1.5 Researcher's Role**

This action research project can assist MCMC in improving and providing better planning on e-commerce programmes and initiatives. In this study, the researcher plays an important role in the investigative field, specifically the e-commerce adoption of rural communities. The issues and challenges of PEDi in implementing the e-commerce programmes should not be overlooked. It was the researcher's responsibility to conduct this study and address the issues. The researcher is responsible for explaining the procedure, collecting data, and suggesting intervention ideas to overcome the problem, raise awareness and improve the e-commerce adoption of communities within the PEDi.

## **1.6 Significance of the Research**

### **1.6.1 Theoretical**

The study is intended to evaluate the adoption of e-commerce among the rural communities and the factor that encourages the intended use of e-commerce technology at the adoption stage based on a study sample from selected communities within Internet Centre. Theoretically, the adoption level of communities can be examined by attributes that are affecting the adoption such as performance expectancy, effort expectancy, social influence, facilitating condition and behavior intention. All these factors have a relationship with the adoption of e-commerce technology of the communities. The e-commerce adoption depends on the functional feeling of the individual which reflects perceptions, attitudes, motivation and psychographic (Awa, 2015). The justification from this study is significant to help identify the factor influencing to adopt e-commerce and answering the question either by improving the

perception of e-commerce, the rural communities will adopt to e-commerce successfully and eliminate the barrier that hinder them from adopting.

### **1.6.2 Practical**

In practical, the adoption of e-commerce technology by the rural communities can be determined by various factors such as awareness and readiness to adopt. The organization has to identify the appropriate planning and strategies on e-commerce programmes to the community, as it is important to increase the e-commerce adoption among the rural communities. The PEDi should take a role to ensure the community within their internet centre are developed an interest towards e-commerce and attempt to adopt it in their daily life. The factors such as knowledge, skill and confidence play vital roles in adoption of communities as it has contributed to community awareness on e-commerce. This study also demonstrates the benefit it provides to the communities when they are aware of the potential benefits of e-commerce. Any improvements can be producing better perception towards e-commerce. In addition, the conducted study would be helpful to MCMC to appraise on how to enhance the e-commerce programmes at PEDi and address the issues highlighted in the study. As a result PEDi will have a better guidance programme, innovate module materials and appropriate e-commerce design training. Then, PEDi will be more competent to deliver the e-commerce programme to its communities and the execution of the work process will be improved. In addition, this study could also lead to the understanding of the baseline data for further evaluation on e-commerce programmes activities and PEDi's performance.

## **1.7 Definition of Terms**

The most used term in this research is e-commerce adoption. E-commerce or electronic commerce is selling, buying of products or services or both through a computer network (Turban, 2010). The advantage of adopting e-commerce is that it can help in reducing cost, increase sales and productivity, save processing time, market expansion and increase customer loyalty (Turban, 2010). Besides, the terms as Performance Expectancy, Effort Expectancy, Social Influence, Facilitating Condition and Behavioral Intention that are used in Chapter 2 under the UTAUT theory and model in investigating the factors that influence the e-commerce adoption amongst the community of this study area. In many studies, UTAUT to understand the user's intention to adopt e-commerce.

Pusat Ekonomi Keluarga Digital Malaysia (PEDi) Kampung Ubai is located in the rural area of Kuantan district, Pahang. The existence of PEDi in rural areas are mainly focused on familiarizing and providing the internet access to the rural communities with additions to content applications such as long life learning, e-government, e-commerce, e-tuition, e transaction. PEDi brings much value to the communities and small business in areas of innovation, training and business development

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