

Barriers to E-Commerce Business Model in Cambodia and The Suggestion: A Case Study

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Abstract

Electronic commerce (e-commerce) has seen as the potential to improve profitability and productivity in many areas as well as gaining notable attention in many countries. Despite, there has been some uncertainty about the e-commerce impacts for developing countries. The sufficient basic infrastructural deficiency, socio-political, economic and the lack of government public ICT policies have formed the significant barriers to the adoption and e-commerce growth in developing countries. Even though there are many researchers have found the common barriers to e-commerce in the developing nations, all business models targeting those countries are not equally successful. Small companies' persistence failed to challenge the e-commerce barriers in Cambodia because the firms didn't know the correct business model to succeed in this country online market. Therefore, this study will discuss the existing barriers which lead to limit e-commerce growth in Cambodia and the suggested solutions with the suitable business model for the e-commerce business in the country too.

Keywords E-commerce, Developing Countries, Business Model, Cambodia, E-Commerce, E-Commerce and developing country

1. INTRODUCTION

The Internet users' quantity globally has been incredibly increasing and provided the stimulus reason and the opportunities for the regional and international e-commerce. However, the Internet use gap on all aspects between developed nations and developing countries is different from each other. Notably, the various characteristics of the local infrastructural and socioeconomic have created the extraordinary level of variation in the reception and growth of e-commerce in different locales around the world.

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With non-restricted to purchasing and selling products over the Internet, E-commerce consists all supporting activities during the process of business. Besides, E-commerce is seen as the essential resource which improves the local economic and accelerated production globalization and accessible technology development [1]. The study demonstrated E-Commerce business influences to the economic sector. The research found that E-Commerce continued expansion can drive to pressure downward on inflation through the better competition, cost-savings, and changes in the behaviour in setting the sellers price. The rapidly continuous growth of e-commerce could lead to increase the productivity growth and descending inflationary pressures which persist for several years. Therefore, E-commerce is well accepted and recognized in the developed countries and also plays a significant role in economic development which can span to more efficient marketing action, greater efficiency in processes, higher satisfaction levels of the customer, and higher return on investment [2] [3]. While developed countries benefits a lot from this commerce, in contrast, the developing regions still have not adjusted to its business model; and also the developing countries are not taking advantage of it. Additionally, most developing country-based businesses have failed to obtain the benefits offered by modern information and communications technologies. [4]

As other developing countries, Cambodia's e-commerce business has been slow to connect since 2012; also it has been the challenging for the enterprises who wanted to approach this business model in this country. Some companies have been shut down their businesses through remarkable barriers [5] (e.g. Internet start-up platform Rocket Internet started an electronic online retail store called shop.com.kh, only to close its pragmatic shutters two months later.)

There are twofold purposes for this study; first is to identify the barriers which cause the limitation of e-commerce growth in Cambodia and suggest the good solution for it; second is to determine the right targeting business model in this country. To draw the conclusion of these goals, the information related to e-commerce business model in Cambodia from 2012 to 2016 will be gathered. Moreover, the success e-commerce businesses and their business models will be studied to find out the success factors in the real e-commerce situation in Cambodia. [6]

This paper will draw upon the literature review which included three parts. The first part will study the barriers to electronic commerce in Cambodia by discussing from the research that have studies about the the hurdle of e-commerce adoption. This part will cover the economic, cognitive, and socio-political barriers which related to Cambodia e-commerce current situation and environment. The second part will emphasize the business model of current e-commerce. In the third section, we will analyse the successful e-commerce business model of the two influent websites in Cambodia. Following this section, there will be discussion and analyse to get the result of the study's purpose. In the last section, the study will be summarized and define the future research relevance to e-commerce adoption in Cambodia.

2. Literature Review

2.1 The Barriers to E-Commerce in Developing Countries

As living in the Internet era, the hope for the possible impact is high for e-commerce initiatives on the developing countries' economies [7]. Despite the barriers, Kamel and Hussein defined that e-commerce gives unique opportunities for expanding trade, facilitating the transactions of business, promoting investment, giving a larger and more varied market tool [8]. However, the vital success evidence in such efforts decision is complex [7]. The research of e-commerce efforts in developing countries recognize there are many barriers to be faced [9]. The United Nation's Commission on Trade and Development annual report of 2004 noted that barriers differ from country to country and region to region, but the barriers commonly found included five factors. First, the barriers that related to managerial skills needed to plan and successfully and implement the e-business strategy. Second is the connectivity; third is trust of the customers. In developing countries, buyers feel more protected managing transactions from famous companies and brands (normally belonging to developed countries) rather than from unnamed companies online [10]. Meanwhile, the logistical networks for the immediate and reliable delivery of the product. The most significant barrier is the lack of supportive legal and regulatory environment [11]

While those boundaries were important at the beginning of the decade, it shows that neither business hypothesis nor innovation technology is static. Throughout the decade, there will be anticipation those administrative abilities will enhance in connection to the web-based business, availability to be faster and less expensive in most of the world, branding is to be more efficiently, logistical systems to enhance and laws to be established. To put it plainly, there is a hope to see a few territories of improvement in online business efforts [7].

2.1.1 Economic Barriers

The Economic status in the developing world is broadly known as the major obstacle to e-commerce adoption. The GDP and income per capita are the indicators of the economic situation of a country. Generally, e-commerce relies on some infrastructure of technology which are moderately expensive for many developing countries, and they have the bad economic condition and are not possible to be involved in e-commerce. For instance, the original and continuing cost of Internet access have fallen in following years, but it continues a significant hurdle to e-commerce adoption in developing countries. The Economic status in the developing world is broadly known as the major obstacle to e-commerce adoption. The GDP and income per capita are the indicators of the economic situation of a country. Generally, e-commerce relies on some infrastructure of technology which are moderately expensive for many developing countries,

and they have the bad economic condition and are not possible to be involved in e-commerce. For instance, the original and continuing cost of Internet access have fallen in following years, but it continues a significant hurdle to e-commerce adoption in developing countries. The Internet access cost applicable to income affects the use of the Internet. The monthly Internet connection prices are still very costly in most developing nations. The differences in income distribution involve the Internet is not affordable for a huge population portion in the rural areas. Besides, the common problem encountered in developing countries is the contrast between the rural and urban areas with regard to the use of technology. ICT use is somewhat common in the urban areas; meanwhile, in some developing countries rural areas, many small companies do not even have computers yet, talk less of Internet access [12].

Related to economic barriers, the Internet diffusion, lack of electricity supply, and unavailability of the credit card are the central problem to the EC. The Internet distribution in Cambodia leads to IT low business value marked by performance and productivity.

According to Internet World State, there are 4,100,000 Internet users reported on June 2016 with just 25.7% penetration compare to the whole population. Furthermore, the discussion of internet services in Cambodia has been broadly over shaded by the firm focus on mobile services. Internet take-up prices remained unsettlingly low for many years, with the country maintaining one of the lowest internet penetrations in the area. The inadequate fixed-line infrastructure had been a significant inhibiting factor in the unveiling of both dial-up and DSL internet services. The access charge of the Internet is also affecting Internet use. Monthly Internet access costs are still very high in Cambodia. The inequalities in revenue sharing mean the Internet is not affordable for a huge ratio of the population in rural areas. According to Samol Khoeurn, the transit costs around \$100 per megabytes because all transit has to come from neighbouring countries, particularly Vietnam. Also for resident and business for Internet Service pricing are extremely high while speed and quality are not adequate. Besides, the Internet usage still measures pricing. Among ASEAN countries, Cambodia is seen as the high cost in telecommunication and Internet Services compare to the income (Samol). Low purchasing availability according to low economic condition (by using GDP per capita).

The common idea which found across in developing countries, also in Cambodia is the allocation between the urban and rural areas in term of technology use. ICT is obviously used in urban areas; while in the rural areas, even some small enterprises do not have computers yet, talk less of the access of the Internet. Plus, the lack and inequality of electronic supply can cause the economic barriers.

The real major problem related to the barriers of economic is the unavailability of the credit card. E-commerce business model is based on the transaction with the credit card. However, the little of

online credit card use and the lack of third-party payment setup options like Paypal are the key challenges for e-commerce start-ups while there is just one bank in Cambodia which accepts the payment gateway. Therefore, it is challenging for the enterprises to sell the physical product online because the transaction from the credit card payment amount needs to be tracked. The prevalent payment system favored by Cambodian e-commerce business is cash-based or cash-on-delivery which is currently payment process of e-commerce.

2.1.2 Socio-political barriers

Regarding on both formal and informal institutions can explain the socio-political barriers. These two barriers can often to be more challenging and take more consuming of time to overcome than technological barriers. Informal institutions are related to social barriers [13]. In Cambodia, personal relationships are relevant in businesses and the threaten relationships of anonymous online established interpersonal networks. The consumer's preference is for personal face-to-face communications over messaging or emails and priority of established relationships over the Internet's interpersonal competency also work against toward e-commerce. Trust has been known in electronic commerce research as an observed risk and a barrier to Internet adoption. Consumers experience has a right attitude towards Internet shopping and place more faith in it. Also, security concerns, for both; credit card and personal information were classified as the influential barrier to Internet shopping acceptance. Consumers grasp more security during online transactions if online merchants can prove that their websites are protected, the purchaser then will acknowledge the seller's aim to provide security conditions during the online transaction [14]. Doing online business depends wholly on trust. When they trust the quality and service, the more will use the service. If clients are worried of being deceived, like receiving products that don't satisfy what they wanted, they will wait to pay the cash personally when the delivery staff brings the product to their home [15].

Political barriers are implied in an orderly way by formally designated groups. E-commerce in Cambodia remains to be limited by a lack of law that is reducing the increase of the country's online economy compared to the area [16]. Some developing countries included Cambodia treat ICT products as richness items and impose import duty, sales tax, surtax, value-added tax, etc. [17]. Even though the drafting law has been submitted to National Assembly of Cambodia already, but the publish of the law has been delayed and not yet to confirm from the National Assembly. Weak formal institutions also more vulnerable consumer trust in e-commerce and readiness to buy online [18]

The initiatives of E-commerce law in Cambodia have been supported by WTO membership in 2004, the initiative of eASEAN, an expansion in global trade, and increasing Internet invasion. The

draft law includes requirements for e-government and e-payment. It relies on the UNCITRAL Model Law on E-commerce but also involves some wider issues such as cybercrime, the protection of consumer in online transactions and content law. There is not significant work has been initiated at this phase on data protection. Cambodia has a huge number of mobile phone penetration but the moderately low level of Internet and fixed broadband access describe a bottleneck for higher uptake of e-commerce. The process towards harmonization has been the most powerful in ASEAN of e-transactions laws, with 9 out of 10 member countries now having the appropriate law in place. Cambodia has not yet passed electronic transaction law, even though a draft law has been developed as shown in the table 1 below. [9]

The drafting of such a law, which has been finished at the intermenstrual level and is currently expecting the submission to the Council of Ministers will ease the worries of both merchants and buyers. Many manufacturers and consumers are still cautious of handling comprehensive business over the Internet because of the lack of a predictable legal environment governing transactions. “The draft e-commerce law provides the legal acknowledgment to electronic records and electronic signatures by way of evidentiary assumptions to guarantee these have the same legal effect, validity or enforceability as writing records,” said Dr. Sok Siphana, Advisor of the Royal Government of Cambodia. For example, there would be no distinction between an electronic signature and a physical signature when completing the legal requirements; and no legal inconsistency between electronic records and writing files. [5].

Table 1 Status of e-commerce law harmonization in ASEAN as of March 2013

Member Country	Electronic Transactions	Privacy	Cybercrime	Consumer Protection	Content Regulation	Domain Names
Brunei Darussalam	Enacted	None	Enacted	Partial	Enacted	Enacted
Cambodia	Draft	None	Draft	None	Draft	Enacted
Indonesia	Enacted	Partial	Enacted	Partial	Enacted	Enacted
Lao People's Democratic Republic	Enacted	None	None	Draft	Enacted	Partial
Malaysia	Enacted	Enacted	Enacted	Enacted	Enacted	Enacted
Myanmar	Enacted	None	Enacted	Enacted	Enacted	Enacted
Philippines	Enacted	Enacted	Enacted	Enacted	None	Enacted
Singapore	Enacted	Enacted	Enacted	Enacted	Enacted	Enacted
Thailand	Enacted	Partial	Enacted	Enacted	Partial	Partial
Viet Nam	Enacted	Partial	Enacted	Enacted	Enacted	Enacted

2.1.3 Cognitive Barriers

Cognitive barriers are associated with individuals and organizational decision makers. The cognitive barriers are more earnest than other categories of barriers in developing countries. Many effects such as poor awareness, education, skills, and confidence are known as cognitive feedbacks. For instance, the top management's the other evaluation impact cognitive leaning toward e-business. In developing regions, business, organizations' human, and technological resources, a lack of understanding and awareness of potential opportunities, risk horror, and inactivity often affect to a negative cognitive estimation of e-commerce. Consumer's lack of knowledge and outreach of e-commerce benefits and their lack of trust in service providers also have limited e-commerce. Just like above mentioned, a low rate of credit card usage in Cambodia can be attached to the lack of trust in than lack of access to the credit card method. Furthermore, concerns related to postal frauds were among substantial barriers to e-commerce in Cambodia.

A final difficulty with cognitive barriers is relevant to general and a lack of English language skills and computer illiteracy. Notably, most software, user interfaces, and content on the websites are in English. According to Wikipedia, only 1,500,000 out of 15,205,539 people understand English. The lack of ability in the English language has consequently been a major inhibitor among non-English-speaking consumers, especially the previous generation. Whereas in the business level related to cognitive barriers are the lack of knowledge to use ICTs successfully with the firm model, high levels of the aversion of risk, and the lack of workforce with the expertise of e-commerce. Essential cognitive barriers are lack of awareness and knowledge of e-commerce advantages and lack of high quality of Khmer language online. Meanwhile, the feedbacks rate weak user or friendly website design as the single invisible barrier, followed by difficult to find what you are looking for, expensive Internet access fees and telephone prices, lack of satisfaction in online shopping, the taxes of Internet are high and incompetent literacy in the Internet and computer usage. For these findings, to a more extent, supported that the wide majority of the respondents can be categorized as cumbersome and tech-savvy online users. The term tech-savvy applies to the skilled ability to operate and use standard computer programs for an assigned task or project.

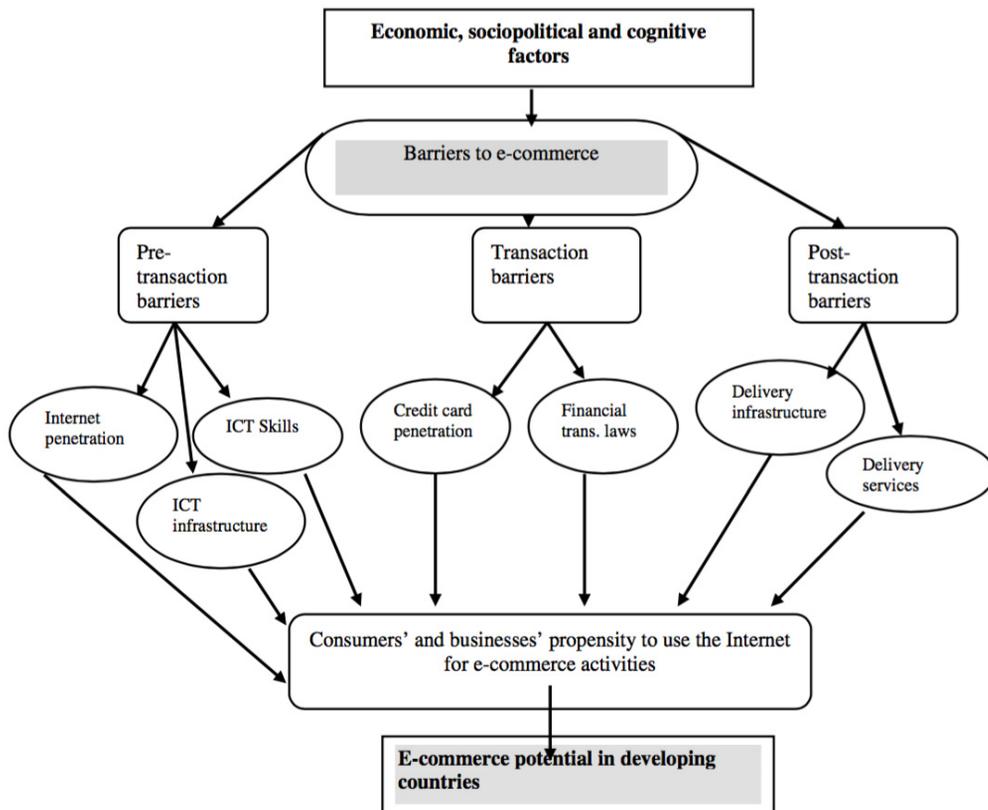


Figure 1 Factors impacting the diffusion of e-commerce in developing countries

2.2 E-Commerce Business Models

The business model is a description of a company's purpose to create and gain value by connecting the new technological environments to business approaches. Lam and Harrison-Walker determined that there are around fifty e-business models of revenue-generating. Various methods are used to explain these models. The scholars with marketing adjustment use price, product, place, and promotion to define the business model. E-business models are also described in the context of the structural component around the value chain of buyers and suppliers, technical platforms, IT systems and architectures, and security and traffic scale. The same two researchers strictly examined business models manipulated by Internet companies and diminished them through the use of two-dimensional models, relational objectives and value-based objectives [19]. The dimensional of relational objectives is utilised to analyse e-business models based on the connectivity of Internet characteristic. This dimension involves defining the target of market and connectivity correlated objectives. Meanwhile, Value-based

objectives are associated with the value formulae such as revenues generation and others benefits (nonfinancial participation such as enhanced the effectiveness of marketing or increase in the attitudes of the consumer). All e-business models are not fairly interesting in the developing world. For example, in the shopping business model, providers aim to assist visitors to find particular products and their satisfied prices online. However, since very some sellers sell goods online, this model is not broadly employed in developing countries. Moreover, some e-commerce business models in the developing world operate key elements in developed countries. The cooperation related to banking is needed with the bank also the remote hosting and setting up accounts in the US.

The country-focused of developed e-business models need adjustment in the developing countries. The cash-on-delivery need to be considered. The cash-on-delivery makes sense in the developing world because banks offer door-to-door cash transfer services, people keep large amounts of money at home, and high transactions are made in money. Even online purchases in China are also given by a confirmation from email, cash-on-delivery or a wire transfer. On the other hand, partnerships with developed country-based multinationals have also developed to facilitate e-commerce.

3. Research Methodology: A Case Study

To accomplish the goal, this study uses a case study research methodology. Multiple sources are used in this research. First, the related literature studies that have been done will be collected and analysed to adapt with the problem of the study. Furthermore, the extensive secondary materials will be collected. The big e-commerce websites in Cambodia like khmer24.com, maiomall.com will be interviewed to know how their business succeed. Based on the findings of the fundamental failure in developing countries' e-commerce model, we will investigate those problems. The survey will be conducted to find out the real e-commerce business model in Cambodia.

Case studies are the most powerful research method in software engineering. Case studies are signifying beneficial to the recent phenome in its real-life context when the boundaries between phenomenon and context are not clearly explained. However, the case study phase is used considerably liberally ranging from small toy examples for descriptive purposes to full blown benchmarks with all the necessary threats to efficacy. [20]

There are choices describe different research methods, and each is the different method of collecting and examining the empirical proof, pursuing its logic. Also, each method has its advantage and disadvantages. However, the common misunderstanding is that multiple types of research methods should be hierarchically ordered. Differentiating among the different research

methods and their advantages and disadvantages may need to go ahead the stereotype of hierarchical. The more relevant view may be a comprehensive and pluralistic one: every research method can be applied for all three goals such as descriptive, exploratory, and explanatory. What differentiates the methods is an important sign, yet, the explanation does not indicate that the lines between the methods or the circumstances when each is to be practised are always sharp.

The case-based study demands a sampling the plan of action adjusting on theoretically beneficial cases. Inappropriate, best practices examples produce great applicants for a case research method. It is worth remarking that as the successful e-commerce, Khmer24 and MaioMall model can be viewed as the best system model for e-commerce in the Cambodia.

The reason that this study selected case study because it is used in many circumstances to contribute the knowledge that the inquiry has found as a research method. In brief, the case study method provides researchers for preserving the holistic and meaningful aspects of real-life events such as small group behaviour, individual life cycles, managerial and organisational processes, the change of neighbourhood, school performance, international relations, and the industries maturations. As mentioned earlier, this study requires a lot multiple sources; therefore, it fits the case study inquiry which relies on various sources of proof with data requiring to gather in the fashion fashion and another result. However, there are many methods in case study which divided into seven methods: feasibility study, pilot Case, comparative study, observational study (Ethnography), literature survey, formal model, and simulation (Demeyer, n.d.). For this finding, the literature survey is chosen. There are four key fundamental advantages for this method to apply for this research. First, it can be the assessment of the current situation of analysis on this topic. Apparently, it is the most precise value of the literature review. After this research project, the search for related information sources will help determine what is already known about the e-commerce boundaries that limited in other developing areas. Second, it can be the associations of the experts on this topic. One of the further benefits received from performing the literature review is that it will promptly expose which researchers are plausibly the experts on the topic. It can be the identification of key questions about this subject. There is already research about this subject in other countries. However, there is not any research related to Cambodia. To improve the e-commerce model in Cambodia, the real barriers need to be found out and solve them. The determination of methods used in previous studies of the similar topic. It is useful to review the kinds of studies that past researchers have originated as a means of discovering what approaches might be of most advantage in more distant explaining the topic [21].

4. Analysis of E-Commerce Business Model in Cambodia

4.1 Maiomall.com's business models

Maiomall came from the phrase My All in One Mall. Maiomall is recognised as the largest online shopping in Cambodia by international, bringing them essential corporate partner with Amazon. This e-commerce is the founded subsidiary by WorldBridge Commerce Co. Ltd. (WBC) which is a big online solution company in Cambodia. The website was established in 2015. Even though it just recently establishes, the website is gaining attention from the online buyers in Cambodia since it cooperates with the Amazon. Like other online e-commerce, this website is a B2C e-commerce which targets the users from many categories such as Food & Groceries Fashion, Jewelry & Watches, Computers, Phones & Electronics, Health & Beauty, Stationaries & Books, Music & Entertainment, Toy, Kids, & Baby Home, Garden & Decoration. Despite the fact that the website just establishes, the website got daily visitors 2,211 according to yourwebsitevalue.com analytic.

To encounter the barrier of E-commerce in Cambodia, Maiomall uses the good business methodology to give the benefit for both vendors and customers. For vendors, the website aims to provide the reliable corporate partner, free Supporting administration, marketing and advertising, free products and shop branding, new customers and increasing sale, and vendor account to control stock and follow up the purchase order. For the customers, this large-scale e-commerce site will enable users to shop, book tickets and hotel rooms, purchase services also transaction and financial operations. Moreover, the website will deliver the products to the front door of the customers' houses. Besides, to adjust the payment method in Cambodia situation currently, the website allow the user choose payment methods such as (1) Pay by cards like visa card or master card; (2) the user can pay by Wing which is the Cambodia's leading mobile banking services provider offering financial composition through mobile banking services to the unbanked and under-banked. For the users which do not have the visa card, this method is so convenient. There are many Wing agencies around the countries that users can easily find the nearest store in their area to make the payment; (3) Pay cash on delivery which is the trustable method that makes the users trust more on the website. With this three methods, the website can face the payment barrier in Cambodia to succeed the business. As of now, there are more than 70 companies cooperating in the website and more than 1000 products in the websites. MAIO Mall is considered as absolutely the key in shaping the e-commerce industry in Cambodia [22].

4.2 Khmer24.com's relational/value objectives and business models

4.2.1 The Relational Objective

With the pawnshop business concept, Khmer24.com is leading in C2C online business in Cambodia. In Cambodia, if you need to get money necessarily and urgently, the most practical way may be a pawnshop. They just give their things to the shop when they are broke and when they have money they can go take them back. It is common for people to sell their things when they need money instantly. The seller charges customers five percent interest per month, to calculate, the customer will lose 60 percent of their value in a year. However, there is also the fact that the pawn shop owner worried about. In 2010, under an announcement from the government that all the pawn shop owners are obligated to have the permission to operate, along with the minimum asset of 80 million riels (around \$20000). Therefore, it is difficult for small shops with small capital difficult to run their business, and also do the customers.

Selling and buying new stuff, and also selling it when it gets older is prevalent in Cambodia, but most people do not aware how to get the most money out of the property they want to replace. To make sure that for the best place to sell the antiquated assets, there are many variety places and method that could buy back the products to find out how people can be sure to get a most possible in exchange for antiquated or outcast phones, computers, cars motorbikes and jewellery. One of the options is selling them on the Internet like social media and websites.

Phnom Penh's markets may be the scramble, however, it cannot be assumed as the best place to sell the product. Selling goods on the internet on e-commerce websites such as khmer24.com can give the seller more authority over the cost people give for their valuables. The owner of the website, Mr Ty Rady said that the customers can buy the product with the good price since they do not the agents. He added that 30 to 40 percent of the users on his website are students looking to sell or buy the computer and mobile phones. The sellers can set the own price and interested customers will call the seller. Selling things on the internet, people need to know the product worth, however, the sellers are the only person who can show it. [23]

Khmer24.com is the first C2C e-commerce website in Cambodia which provides the online marketplace in Cambodia and was established in 2008. The website enables the consumer to sell their assets like electronic devices, cars, motorcycle, residential property, cars, motorcycles etc. or rent a room by posting their information on the website. Since Cambodian like to sell the used things, and also the SMEs do not know how to advertise their products, those consumers are the first target of the business. Since the internet users in Cambodia is increasing like other countries in the world, publishing their products to sell to other people is a common thing.

4.2.2 The Value Objective

Once the asset on sale on the Internet, the product reaches thousands of people looking to satisfy the visitor's demand. So, users just wait to get the phone calls from customers who are interested in their product. Through this websites, there is no point in spending hours or even days walking or finding in every shop to deal for the most affordable price possible. Contrary from many other commercial websites in other countries which demand customers to have the credit card to shop online, Khmer24.com help more as the interactive platform for users to engage and share what they want. As one of the leading E-commerce websites in Cambodia, Ty Rady, the owner of khmer24, said there were about 6,000 sales postings on his website now which are classified into different categories. "Approximately 1,000 people sign into my website per day. People of all groups, from students to professionals, use my website to post their goods," said Ty Rady.

The website that provides customer easy to use when they are finding a product that they want, they do not have to go into every shop to match the price. With just one click on Khmer24, they will get what they want. Despite the lack of credit cards which require trading online in Cambodian business websites, there is still a chance that users could get cheated online. In another website, the consumer got deceived when trying to buy the phone online. The products were posted from people in another country while got nothing after payment. Being conscious of the possibility for being deceived, Ty Rady said he had IT team controlled to get rid the hackers and reduce the risk to the consumers as much as possible. "I do not permit people from other countries besides Cambodia to sign up or even visited my website," said Ty Rady, revealing that most hackers were foreigners who live abroad. "The website is for Cambodian consumers only so that they can gather face to face to avoid cheating during the transaction."

Currently, the website can generate the revenue from many advertisements. This website is known as the most profitable e-commerce website in Cambodia. Besides advertisements, the website also earns from the business accounts which registered in the website that provide more benefits than normal seller accounts such as boosting their products in the top, free ads banner, website own pages. The business account just needs to pay every six months 30\$ for the service.

5. Discussion

In the previous section, provide the overview on the two e-commerce websites' strategies, khmer24.com and maiomall.com to overcome e-commerce barriers in Cambodia. Maiomall.com targeted the vendor by providing the benefits for them to encourage them to engage with the websites. Also, the website is cooperating with the giant international e-commerce company Amazon.com to build more trust for the customers. For the customers, Maiomall provides the

paying methods which are really convenient and trustable way as well as they are really common in the country. Whereas Khmer24.com which is the leading C2C e-commerce website in Cambodia overcome the economic barrier by choosing the business that fit the situation and needs in the society. Khmer24.com provides many functions and feature for both sellers and customers. Both of these websites could be considered as the success business models for Cambodian e-commerce industry.

In Cambodia, a company's success depends on its capability to implement and manage multiple e-business models. The barriers factor of economic, socio-political and cognitive define the relevant e-business model. These factors define which relational and value objectives best adjust the market. The lack measurement of economic in Cambodia prohibits the possibility of the country's businesses to focus on one or a few e-business activities. Khmer24.com would not succeed if the website just targeted the big shops or pawn shops. Meanwhile to Maiomall role in the transaction phase of e-business, it also provided the payment and delivery to satisfied to the customer. In moderately small markets, firms can add value by bunching together various products and services. Because of the three factors (economic, socio-political, and cognitive), very few firms are compliant to take risks.

From the viewpoint of the country-focused Internet provider, the need of related support services restrains the completion of e-commerce activities. While at the same time, yet, firms have chances to give higher value to vertical combination and bunching various services. To deliver full potential, firms need to outsource also cooperate some function to the industrialised world. It is impossible for developing country based company to overcome all e-commerce related barriers. The only method to break some of the barriers is to find some e-commerce functions by the cooperation with industrialised countries. Some of the cognitive barriers (e.g human resource, the development skill) are to be performed with outside help to enhance the value performance.

6. Conclusion

The remarkable level of variation in the acceptance and growth of e-commerce has been formed the various characteristics of the local infrastructure and socioeconomic in different locales around the world. Especially, E-commerce is well-recognized in the developed world and play the important role in economic development which can spread to more efficiency in the process, and higher return on investment. However, developing countries yet to take hold of this benefit for the economic growth slowly. Also, the same as other developing world, Cambodia is as slowly to take hole the adaption of e-commerce through some barriers [20].

The contribution of this paper is to explain the barriers and the solutions to e-commerce

industry in Cambodia. In the above discussion shows that economic, socio-political and cognitive parts are the significant roles in the evolution of business models in the context of Cambodia. The study also discussed the case illustrating how a firm can overcome the barriers to all the factors.

Apparently, there are many successful factors to be learned about e-commerce in Cambodia. However, there are remarkable points needed for future research. First, all business models targeting in this country are not fairly successful. The future research is needed to address what kind of factors that could distinguish successful and unsuccessful e-commerce business model in Cambodia.

Second, Khmer24.com flourished in Cambodia because it is the only C2C website in Cambodia. Moreover, Cambodia's e-commerce market is too small for multinationals like Amazon, or eBay to be attractive. Therefore, the second question is what the maximum size of the e-commerce market for the firm to exploit profitably in the country.

Third, the government is more powerful to deal some factors (infrastructure, law) than private. Thus, the final question is what is the maximum level of responsibilities for government and private organisations in opposing numerous barriers addressed in this research.

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References

- A. S. Jagdish N. Sheth, "International e-marketing: opportunities and issues," *International Marketing Review*, vol. 22, no. 6, pp. 611-622, 2005.
- D. Z. M. E. Gawady, "The Impact of E-commerce on Developed and Developing Countries Case Study: Egypt and United State," in *International conference of Globalization , Technology and Sustainable Development*, 2005.
- S. D. Changiz Valmohammadia, "Using interpretive structural modeling and fuzzy analytical process to identify and prioritize the interactive barriers of e-commerce implementation," *Information & Management*, vol. 53, pp. 157-168, March 2016.
- "Poor 'miss out' on net commerce," 20 November 2003. [Online]. Available: <http://news.bbc.co.uk/2/hi/technology/3223388.stm>. [Accessed 18 October 2016].
- H. Hanamariya, "While slow to take hold, e-commerce prepares for take-off," 30 November 2015. [Online]. Available: <http://www.phnompenhpost.com/post-plus/while-slow-take-hold-e-commerce-prepares-take>. [Accessed 18 October 2016].
- M. d. Gaudemar, "A small market for e-commerce," 25 July 2016. [Online]. Available: <http://www.phnompenhpost.com/business/small-market-e-commerce>. [Accessed 17 October 2016].
- W. Wresch and F. Simon, "Persistent Barriers to E-Commerce in Developing Countries: Longitudinal Study of Efforts by Caribbean Companies," in *Global Diffusion and Adoption of Technologies*

- for Knowledge and Information Sharing*, USA, IGI Global, 2013, pp. 205-220.
- O. E. M. K. A. E. H. Kamel Rouibah, "Emerging Markets and E-Commerce in Developing Economies," 2008, p. 148.
- UNCTAD, "Review of e-commerce legislation harmonization in the Association of Southeast Asian Nations," 2013.
- B. J. E. K. M. V.-B. E. V. Travica Bob, "E-Commerce in Serbia: Where Roads Cross Electrons will Flow," *Global Information Technology Management*, vol. 10, no. 2, pp. 34-56, 2007.
- "INTERNET USE RISING AMONG DEVELOPING-COUNTRY FIRMS, BUT E-BUSINESS LAGS BEHIND," 2005.
- U. A. T. Japhet E. Lawrence, "Barriers to ecommerce in developing countries," *Information, Society and Justice*, vol. 3, pp. 22-35, January 2010.
- P. B. Tigre and D. Jason, "E-commerce in Brazil: Local Adaptation of a Global Technology," *Electronic Markets*, vol. 14, no. 1, pp. 36-47, 17 May 2010.
- W. Shan, C. Hasan and D. Ziliang, "Early mover advantage in e-commerce platforms with low entry barriers: The role of customer relationship management capabilities," *Information & Management*, vol. 53, pp. 197-206, 2016.
- Morton, K. Hor and Eddie, "New shopping website faces old e-commerce challenges," 18 December 2014. [Online]. Available: <http://www.phnompenhpost.com/business/new-shopping-website-faces-old-e-commerce-challenges>. [Accessed 19 October 2016].
- M. d. Gaudemar, "Businesses give input for e-commerce law," 30 November 2016. [Online]. Available: <http://www.phnompenhpost.com/business/businesses-give-input-e-commerce-law>. [Accessed 30 November 2016].
- D. Stephens, "Digital signatures and global e-commerce," *Information Management Journal*, vol. 3, no. 1, 2001.
- MOC, "CAMBODIA IS SPEEDING THE ADOPTION OF E-COMMERCE LAW," 08 October 2016. [Online]. Available: <http://www.moc.gov.kh/en-us/press-center/details/content/211601>. [Accessed 19 October 2016].
- L. H.-W. Long W. Lam, "Toward an objective-based typology of e-business models," *Business Horizons*, vol. 46, no. 6, pp. 17-26, December 2003.
- R. K. Yin, "Case Study Research," 4th Edition ed., vol. V, Sage Publication. Inc, 2009, p. 4.
- M. Atilano, "Benefits of Conducting a Literature Review," [Online]. Available: <http://libguides.unf.edu/c.php?g=177129&p=1163732>. [Accessed 26 October 2016].
- M. Mall, "About Maiomall," 2016. [Online]. Available: <http://maiomall.com/info>. [Accessed 16 11 2016].
- S. Narin, "Filling up on cash," 3 November 2010. [Online]. Available: <http://www.phnompenhpost.com/lift/filling-cash>. [Accessed 16 November 2016].
- Samol, "The Internet in Cambodia," in *APNIC*, Phnom Penh.
- N. Kshetri, "Barriers to e-commerce and competitive business models in developing countries: A case study," *Electronic Commerce Research and Applications*, vol. 6, p. 443-452, 2007.

- U. Nations, "World Investment Report: The Shift Towards Services," New York and Geneva, 2004.
- S. Demeyer, "Research Methods in Computer Science," 11 October 2011. [Online]. Available: http://win.ua.ac.be/~sdemey/Tutorial_ResearchMethods/ResearchMethods01_MethodsOvervw.4pgup.pdf. [Accessed 26 October 2016].