

Digital Entrepreneur Ecosystem for Digital Economy.

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Bachelor of Computer Science with Honours
(Information System)

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ACKNOWLEDGEMENT

First of all, I would like to thank to Allah S.W.T to bring this work to completion.

I also would like to thank Him for giving the strength for me to complete this work when I feel want to give up. I am forever graceful to Him.

To my supervisor, Dr Nadianatra Binti Musa, I feel grateful for your guidance, time and knowledge that you give to me during the process of this research. Thank you for giving me the opportunities and encourage me throughout the research

To my parents, Yumat bin Hajimi and Nila Kusma Binti Julaihi, thank you for the encouragement and the support that you have given to me whether mentally and financially. To my siblings and friends, I appreciate all the motivation that you have given to me. Thank you to everyone that have help me directly or indirectly.

Lastly, to myself, thank you for keep up with all the deadlines and keep going strong through this work.

ABSTRACT

Nowadays, the economy can be digitalized by adopting and utilizing digital technologies in transaction, services, communication and other core functions to gain more productivity, revenue and income as stated by MDEC. Sarawak government has started focusing on digital economy for Sarawak's economy development. The entrepreneurship is normally started with a small business and in this digital economy era, the Digital Entrepreneurship is becoming a trend. There are changes in the business operations and practices due to the rapid growth of technologies. Besides, there might have several new policies for digital entrepreneurship. The changes and the details of the digital entrepreneur will be recorded in a clear, simple and visually appealing ecosystem through this research.

ABSTRAK

Pada masa kini, ekonomi boleh didigitalkan melalui penerapan dan penggunaan teknologi digital dalam urus niaga, perkhidmatan, komunikasi dan fungsi teras lain untuk mendapatkan lebih banyak produktiviti, hasil dan pendapatan seperti yang dinyatakan oleh MDEC. Kerajaan Sarawak telah mula memberi tumpuan kepada ekonomi digital untuk pembangunan ekonomi Sarawak. Keusahawanan biasanya bermula dengan perniagaan kecil dan dalam era ekonomi digital ini, keusahawanan digital menjadi trend. Terdapat perubahan dalam operasi dan amalan perniagaan disebabkan oleh pertumbuhan pesat teknologi. Selain itu, terdapat beberapa dasar baru untuk keusahawanan digital. Perubahan dan butiran usahawan digital akan direkodkan dalam ekosistem yang jelas, ringkas dan visual yang menarik melalui kajian ini.

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CHAPTER 1: INTRODUCTION

1.1 Introduction

The technologies nowadays growth rapidly and the people need to catch up with it. With these technologies, a lot of things such as communication, transaction, work and daily life activities can be performed easily. The business operation also being influenced by this factor. Now, the economy can be digitalized by adopting and utilizing digital technologies in transaction, services, communication and other core functions to gain more productivity, revenue and income as stated by MDEC.

Entrepreneurship is a process of building up a business and willing to take the risks in the business area.(Hayes, 2019) The entrepreneurship is normally started with a small business and in this digital economy era, the digital entrepreneurship is becoming a trend. It can be defined as changes in the practices and theories of the entrepreneurship which is from analogue to digital.(Allen, 2019)

There are changes in the business operations and practices due to the rapid growth of technologies. Besides, there might have several new policies for digital entrepreneurship. The changes and the details of the digital entrepreneur will be recorded in a clear, simple and visually appealing ecosystem.

Ecosystem is a term that normally use in science. It defines the relationship between the organisms and the environment. Ecosystem term in technology is a bit different compared to the science term. In technology, it defines the interdependent network of the actors that combine to create the innovative products or services as stated by Hal Miran (2016). In this research, the ecosystem helps to identify the flow of the digital entrepreneur for digital economy.

1.2 Problem Statement

In this digital era, a lot of entrepreneurs implement digital entrepreneurship. The basic business operations and practices also change due to it. There might have new policies regarding digital entrepreneurship. The entrepreneurs need to catch up with latest technology to match with current trends. Therefore, there must be a need to create an ecosystem for the digital entrepreneur.

There are also some ecosystem components such as policies and regulations are not associated with the other components which is also important in digital entrepreneur ecosystem. The ecosystem components may be lacking in some way because of the trend changes. The digital entrepreneur needs to be refined and updated to the latest regulation and policies.

1.3 Scope

The scope of this research is Digital Economy. It focuses more on Digital Entrepreneur and components needed by the digital entrepreneur ecosystem. Such as, law, acts and new policies for digital entrepreneurs.

1.4 Objectives

The purpose of this research is to create a visually appealing flow for the digital entrepreneur ecosystem. The objectives of this research are:

- i. To collect data by analysing articles, books and journals.
- To explain the details of the digital entrepreneur ecosystem from the data collected.
- iii. To verify and validate the design of the digital entrepreneur ecosystem.

1.5 Methodology

For this research, the method use is qualitative research methodology. Qualitative research methodology suitable for this project because it matches the research goal which is describing and explaining the digital entrepreneurs' ecosystem. The advantages of using this methodology are easy to understand, clear and simple. It has 6 phases which is Planning, Literature Review, Data Collection, Data Analysis, Design Ecosystem and Verify and Validate Ecosystem.

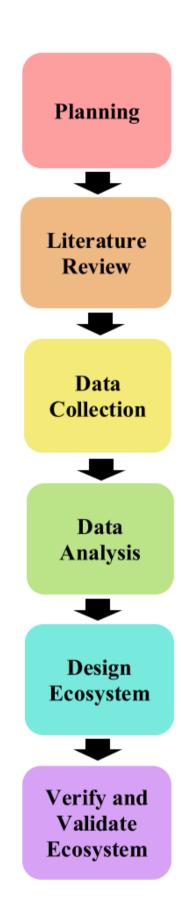


Figure 1.1. The methods used in Digital Entrepreneur Ecosystem for Digital Economy Research

i. Planning

In Planning phase, the problem statement and objectives are defined. The methodology also has been chosen during this phase. Furthermore, the schedule for the project is being generated. The schedule starts from 9th September 2019 and would end on 18th December 2019. The specific tasks for the research are included in the schedule. Gantt Chart is being used to visualize it.

ii. Literature Review

In Literature Review phase, the journals and articles that related to the research is being reviewed. From the review, the concept of digital entrepreneur is identified. Besides, the comparison of problem statement, objective, methodology and finding from the articles also gain.

iii. Data Collection

In Data Collection phase, the set of interview questions is prepared. The interview will be conducted once the questions is done. The interviewee are the local entrepreneurs and agencies that involved.

iv. Data Analysis

In Data Analysis phase, the data from interviews will be analysed and the outcome for data analysis is the ecosystem of digital entrepreneur.

v. Design Ecosystem

In Design Ecosystem phase, the design of ecosystem is created from the data analysis and literature review. The design must be simple and clear. Furthermore, the design should be easy to understand and visually appealing.

vi. Verify and Validate Ecosystem

In Verify and Validate Ecosystem phase, the ecosystem design needs to be verified and validated. Once the design is validated and verifying is done, the ecosystem will be submitted.

1.6 Significant of Research

This research will help to expose the communities with digital economy. It will help the entrepreneurs to identify the flow on becoming a digital entrepreneur. By having this research, it assists the communities to explore and improve their business through digital technologies.

1.7 Research Schedule

Research schedule is produced by using Gantt Chart. It will show the start date which is from 9 September 2019 until 24 July 2020 which is the end date of this research. The research schedule shows in Appendix A.

1.8 Expected Outcome

Expected outcome of this research is an ecosystem for digital entrepreneur. A clear, simple and visually appealing way flow with the main and complex facts regarding digital entrepreneur ecosystem to the audience.

1.9 Research Outline

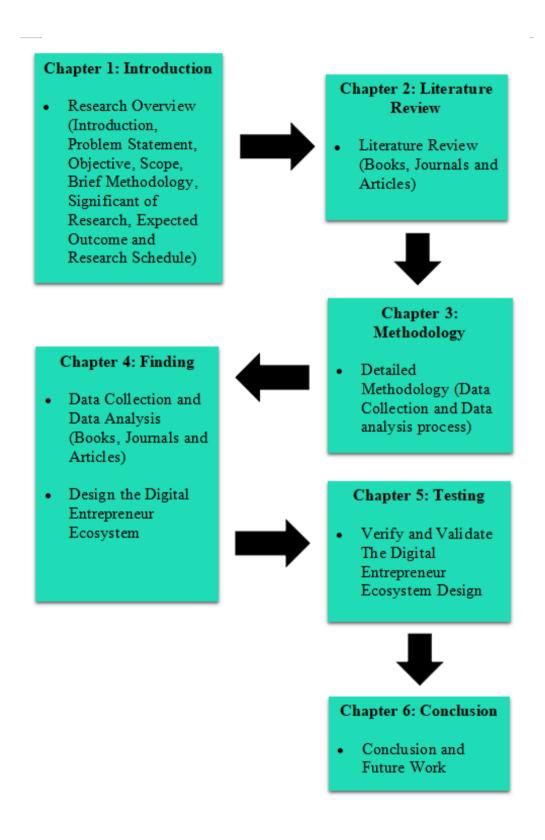


Figure 1.2. The project outline for Digital Entrepreneur Ecosystem for Digital Economy

Chapter 1 depicts the introduction of the research. It consists of background of the research domain, problem statement, scope, objectives, methodology for the research, significant of the research, research schedule and expected outcome of the research.

Chapter 2 discussed on the essential components and requirements of the domain - the analysis based on books, articles, journals and trusted websites that are related to the digital entrepreneur and digital economy. The contents are developed from the review.

Chapter 3 explained the methods for integrating the data which are data collection and data analysis in details. The data collection will be done by interviewing the local entrepreneur and agencies that involve.

Chapter 4 shows the finding from the data collection and data analysis. The related set of interview questions are prepared before the interview session. From the data collected, the ecosystem will be design. The ecosystem will be describe in details.

Chapter 5 discussed on the verification and validation of the ecosystem. The ecosystem will be verify whether the ecosystem is correct and clear or not.

Chapter 6 concludes the result throughout this project whether the objectives will be achieved or not.

CHAPTER 2: LITERATURE REVIEW

2.0 Introduction

This chapter discuss and describe on literature review and background study of Digital Entrepreneur Ecosystem in Digital Economy. The aim of this literature review is to describe in details about the article and journal which correlated with the proposed research. This chapter discuss further on the differences between the articles related with this study.

2.1 Digital Economy

The development of transistor in 1950s have created a path for advanced digital computer and in information era (1980s until now), the digital revolution progressed by digital computer. The future of digital is shaped by digital revolution with the essential idea which is internet. Digitalization as a procedure of moving to computerised business created for economic development and advancement. As the piece of business revolution 3.0, Internet and billions of transportable and associated gadgets re-imagined correspondence. Presently, Industry 4.0 provides clear indication another age that is controlled by new advances. Industry 4.0 combines advanced production and operations techniques with good digital technologies to make a digital enterprise that will not solely be interconnected and autonomous however may communicate, analyze, and use information to drive any intelligent action back within the physical world. The new advancements square measure breaking out daily and up to alter the enterprises (Gupta, 2019).

In the digital economy era, Information Technology (IT) and new media became sources of competitive upheaval and innovation in business processes and models. Bits of data instead of products are processed, expedite the shift faraway from the manufacturing of products and toward an economy based on the production and circulation of data and knowledge-based services (Davidson and Vaast, 2010). Every country is at a various stages in their efforts to become a digital economy country. With totally different stage of digital economy, it allows the country to create the policy goals and coordinate among policy maker based on the country capability (Chakravorti and Chaturvedi, 2015).

2.2 Digital Entrepreneurship

Based on Davidson and Vaast (2010), the term entrepreneurship appeared within the 1700s to explain the bearing of the risk of purchasing at a certain price and commercialism at unsure costs. Over time, though, understanding of entrepreneurship developed a lot of generally to incorporate the risk-taking behaviors of people who pursue perceived opportunities. Following these definitions, the academic field of entrepreneurship analysis has examined the traits and characteristics of entrepreneurs together with the market and economic conditions surrounding entrepreneurial activities. Entrepreneurs explore for modification and exploit it as a chance. Of explicit interest for our purpose is that the sturdy relationship between entrepreneurship and change in institutions and markets. Entrepreneurship has been characterized as a point of supply of upheaval of the competitive conditions, generating conditions of "creative destruction". The digital media and information technologies have generated new conditions for communication also new opportunities for business models while damaging long-standing, established industries.

Key characteristics of the competitive changes related to the digital economy embrace the larger ability to process and transfer information instantly and freely and the digitization of processes and activities. IT is used as an at least partial means of value production and may be used to circulate the results of entrepreneurial activities and generate new opportunities for digital entrepreneurs. At the same time, the employment of IT and digital media within the production and circulation process makes it tougher for established or emergent actors in these fields to carry on to a sustainable competitive advantage (Davidson and Vaast, 2010).

It refer to digital entrepreneurship as the pursuit of opportunities based the usage of digital media and alternative data and communication technologies. Digital entrepreneurs depend on the characteristics of digital media and IT to pursue opportunities. In doing so, they exacerbate changes within the competitive landscape, as they conceive to seize the opportunities and there by potentially further the artistic destruction process of the digital economy. The worth generated from digital ventures will vary greatly and depends on the type(s) of opportunities that the entrepreneur is seek for (Davidson and Vaast, 2010).

2.3 Ecosystem

Common usage of the term ecosystem in a social science rather than an ecological context became widespread only after the work of Moore (1993), which highlighted the business ecosystem as the firm's external environment. The situation appears to have changed, as seen in the recent attention to entrepreneurial ecosystems—dynamic local social, institutional, and cultural processes and actors that encourage and enhance new firm formation and growth. Entrepreneurial ecosystems have similarities with industrial districts, clusters, and innovation systems; entrepreneurs and spin-offs are present in these other frameworks but are not central as they are in entrepreneurial ecosystems. The notion of an entrepreneurial ecosystem (or ecosystem for entrepreneurship) is quite new and has emerged from diverse origins. Usually presented as a list or diagram, an entrepreneurial ecosystem includes several players or stakeholders as well as a set of ingredients necessary to the ecosystem. Most diagrams of ecosystems show all components interconnected. Entrepreneurial ecosystems are a means to create and maintain a dynamic local process of entrepreneurship as cumulative causation (Malecki, 2018).