# Toolbuddy Digital Platform – A Conceptual Solution in Peer-To-Peer Rental Marketplace for Tools and Equipment in Malaysia

Muaz Ahmad Faris[1], Mohammad Hafzan Azmir[2], Abdul Rahman Ahmad Dahlan[3]

[1,2,3] Kulliyyah of Information and Communication Technology, International Islamic University Malaysia

*Abstract*: **This paper proposes a conceptual solution to encourage sharing economy as a new disruptive economic force nowadays by providing an online digital tool-sharing platform, named ToolBuddy. ToolBuddy is a Consumer-to-Consumer (C2C) business model which aims to provide an online platform for tool-owners and renters for peer-to-peer sharing of their tools and equipment in short term from a nearby location. This platform provides opportunities to rental provider company to feature their tools and equipment. Conducting Literature Review and benchmarking against current world leading companies that provide tool-sharing solutions by utilizing the nine blocks of Business Model Canvas (BMC) and Value Proposition Design Canvas (VPCs) framework, establishing Strategy Canvas of key competitors, identify solution gaps, and establishing the Environmental Map that incorporates megatrends, and Industry 4.0 have been used as the methodology for this paper.**

*Keywords*: **e-commerce, on-line platform, tool-sharing, equipment, sharing economy, BMC, VPC.**

## I. INTRODUCTION

Peer-to-peer online platform in a new emerging platform happening around our society nowadays. We can now sharing a car ride together, stay in someone apartment for a night, or maybe sharing tools and equipment that wasn't use for a long time from our store. Thanks to the emerging technology that keep improving a lot from day to day. Therefore, we come with a conceptual solution in peer-to-peer rental marketplace for tools and equipment. It is a C2C platform for tool-owner to rent their tools or equipment to others. The aim to make our life more easily when we want to use the tools in a short period of time. Some advantages is that the renter doesn't need to spend a lot of money for buying an expensive tools that just want to use for one or two days. As an alternative from the platform, the renter can only rent the tools from others. In addition, we want peoples in Malaysia use the big advantages of today's sharing economy, and they can save a lot of money and also time.

## II. BACKGROUND

This paper proposed ToolBuddy online platform project in order to take a good advantages of the sharing economy nowadays through the peer-to-peer rental marketplace. E-commerce have been an emerging new technology that many companies and business use as a very lucrative place to spend on advertising and as a marketing tools to do peer-to-peer all around the word, at anywhere and anytime. For a new start-up business especially as C2C platform, we tend to see the good opportunity beyond this emerging new technology as we do the market research, knowing the environmental map and also seeing what our competitors doing. We do focusing on our value proposition as that what the most important things we serve the people that will use our online platform. The main value about ToolBuddy is that people can rent a tools and equipment in short period of time from close location rather than buying new one that only want to use for

several time. Besides, for a new start-up business, the most important aspects come from the financial plan and also the revenue stream as that what will make the start-up business can survive in a long time. Therefore, ToolBuddy aims to charge a small amount of transaction fee every time people rent a tools, and also have a good subscription fee structure for the tool-owners (the lenders) and small business owner. In addition, our minimum viable products will keep on updating and improving based on the users feedback and also from the stakeholders. Hence, we need to have a precise strategic plan and timeline for a long term strategy rather than come out with an assumption theory in planning for a new start-up especially to compete in today consumer-to-consumer (C2C) environment.

## III. PROBLEM STATEMENT

Tools and equipment are very important for people at most time, especially when their want to use it for making life more easily and efficiently. Most people tend to spent a lot of money for buying new tools and equipment every single day, but sometimes they just want to utilize it for short period of time as example when doing house renovation using different type of equipment. Hence, it has been found that people always face with hard time to find and search a good tools or equipment that fit what their want in short period of time within close location. Moreover, people found that when they are borrowing from their neighborhood, some of the tools or equipment might be in low quality or not in good conditions. However, for the tool-owner (lenders), they will have a difficulty to trust others people to return back the items that have been renting by somebody new to them even though it might be their close friends. Hence, people are demanding to rent a tool or equipment with a trusted and non-transparent peer-to-peer online platform that can connecting people all around them with a safe services, high guaranteed availability and high credibility online platform. It can help users to save a lot of their money from renting items from big rental companies to a conceptual solution of renting from nearby peoples.

## IV. LITERATURE REVIEW

### A. Mudah.my:

Mudah.my was founded and launched in 2006 [1], it was well-known right now as the online classified ads website named '*mudah*', which in English was described as an easy method to find, buy and sell almost anything in their online marketplace. With a good reputation, recognition and was voted as the Favorite E-Services at NEF-AWANI ICT Award [2], the site was visited with 1,887,000 unique visitors and receives approximately 1.7 million items listed daily. The purpose of Mudah.my is to build a Malaysia's largest online marketplace that allows anyone to buy and sell in his or her region conveniently, without the need for a physical shop or a registered company. Therefore, the customer segment are people of Malaysia and business owner, because it now was became a big giant in online marketplace that was range very widely across the country.

In Mudah.my, one of the value proposition is the ease for every members to find, buy, and sell almost anything, near where they are, conveniently in a very simple manner. Besides, Mudah.my also provides a good affordable and wide variety of goods, products, and services under different categories such as real estate, automotive, careers, business products and services. One of the way to keep interacting with their targeted customer is by email newsletter and also social media such as Facebook, Twitter and Instagram. With a good tapping in internet community, now they are investing more advertising cost on billboard, TV commercial and also newspaper.



**Fig. 1: The interface of mudah.my**

*B. Sewa.com.my:*

With a tagline *"Why buy when you can rent?"*, its shown that Sewa.com.my is an online platform that people can rent something instead of buy. Sewa.com.my was founded in 2015 located at D'Bayu Bukit Jelutong, Jalan Serambi U8/21, 40150 Shah Alam, Malaysia.[3] The purpose of Sewa.com.my is to connect renters and *rentees* where users can rent everything, from gowns to golf clubs in a consumer-to-consumer (C2C) online platform. Therefore, its served two main customer segments which are the renters (who rent an item) and *rentees* (who own an item in their own term).

In Sewa.com.my, one of the best value proposition which allows users to transact securely within its platform, ensuring that both renters and *rentees* will always get what they are looking for, guaranteed by Sewa.com.my. [4]. For example, if we are travelling from Kuala Lumpur to Langkawi and we travel with a family of three children, instead of bring or buying three strollers which we only use once in a while, what about just rent the strollers from Sewa.com.my with reasonable price once we arrive at Langkawi and rent the homestay as well from Sewa.com.my. Besides, it not only save your money, it also eases the amount of luggage you carried while you travel. Other value proposition is that when deal with their platform, and the service they provided is secured transaction and insurance guaranteed. They believe that renting is the way to save time, tons of money and also storage space rather than buying new stuff. On the other hand, they keep interacting with their customer by using channels in social media such as Facebook and Instagram. Some promotion code or new updated will also being announced in their email newsletter to every registered customer rather the renters nor the *rentees*. Lastly, the revenue stream come from 3% on the owner side and 10% on the renter side, but at the moment, they didn't charge any single amount fee yet.
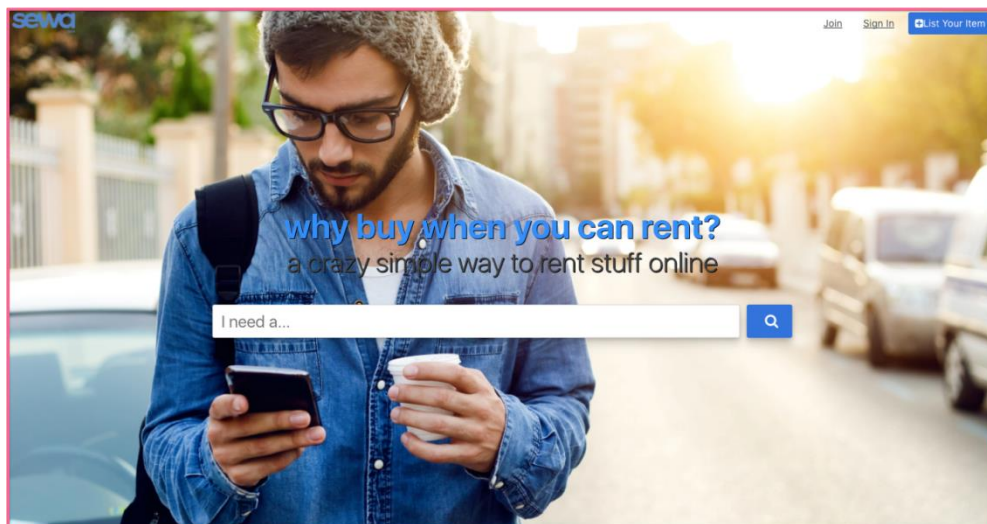


**Fig. 2: The interface of sewa.com.my**

*C. E-warehouse ATKC Hardware Trading Sdn Bhd:*

ATKC Hardware Trading Sdn Bhd was started in 2000 and their warehouse was located at 583, Jalan Serdang Belah, Off Jalan Sultan Abdul Samad, 42700, Banting, Selangor.[5] It is a well-established trading company specializing in hardware & building materials, which include building, construction and home improvement related products & services. After the company discovered the emerging of clicks and mortars in early 2010 and the right time to established an online store for hardware, then ewarehouse ATKC was opened in 2013 with 55 employees that aim to build the largest one stop online hyper store and can shipped their products over 30 different countries including in Australia, Italy, France, Hong Kong, UK and others.

ATKC's target audience in its market includes home owners, contractors, engineers, consultants, architects, quantity surveyors, project managers, and many other professionals. ATKC is very specific with product details and its technical properties, with prices being constantly updated to remain competitive in the market. Besides that, one of the new emerging segment that have been created by ATKC is rental services that specifically for power tools and equipment rental.[6] Users can rent tools and equipment rather new or used from the company in a daily, weekly or monthly basis with a quality and flexibility of huge selection of tools and equipment.

ATKC offers few value propositions to all of their potential customer in order to attract them such as variety of products to choose with over 20,000 products range from Building Materials, Paint, Plumbing, Hardware, Electrical, Power Tools, Kitchen and Bathroom, Home and Garden. Besides that, ATKC also provides value propositions from their own website through good online shopping experience such as search engine, bigger selections of brands and products, support both local and international customers with multiple currency options and also multiple payment options for conveniences.

Therefore, they mainly use their official ecommerce website as a primary channel to keep interacting with the potential customers all around the globes. Besides, social media which is Facebook, Twitter and Instagram also used for the customer relationships between ATKC and their customer segments. Serving all the customer 24 hours a day, 7 days a week, 365 days a year and continuously. Moreover, they develop a functional website with faster, easier, responsive and a good user interface (UI) as their main key activities. Other key activity such as they constantly improvise their shipping module which enable more competitive shipping and delivery rates.

On the other hand, ATKC work closely with Malaysia SME's as their key partners through their Exclusive Online Partnership (EOP) program [7], where SMEs are able to feature their products and services at their online portal to build an international presence. They also key partners with many brands including *Bosch*, *Dulux*, *Black Hammer*, *Blackwood*, *Besi & Logam*, *Dunlop*, *Yale*, and many more. Lastly, ATKC gain their sales revenue from exports which had increased year by year since its ecommerce store.
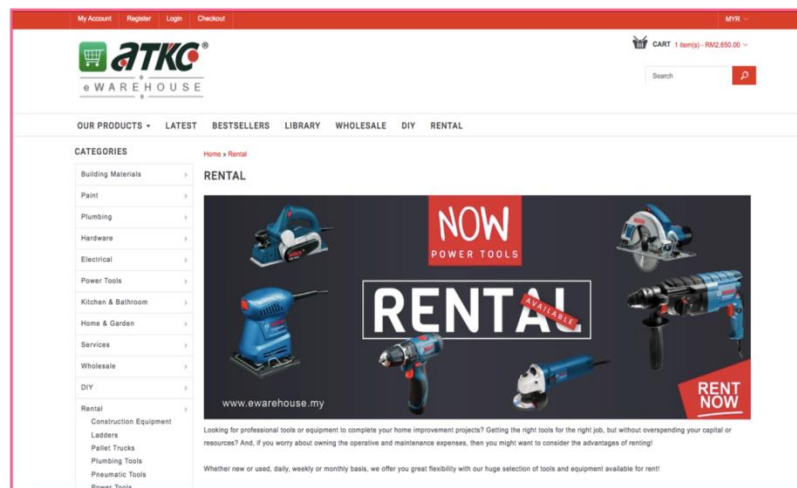


**Fig. 3: The intercase of ATKC e-Warehouse**

## V. STRATEGY CANVAS

Figure 4 shows the strategy canvas that has been applied to create a new market space as well as to make the competition irrelevant between the current systems.
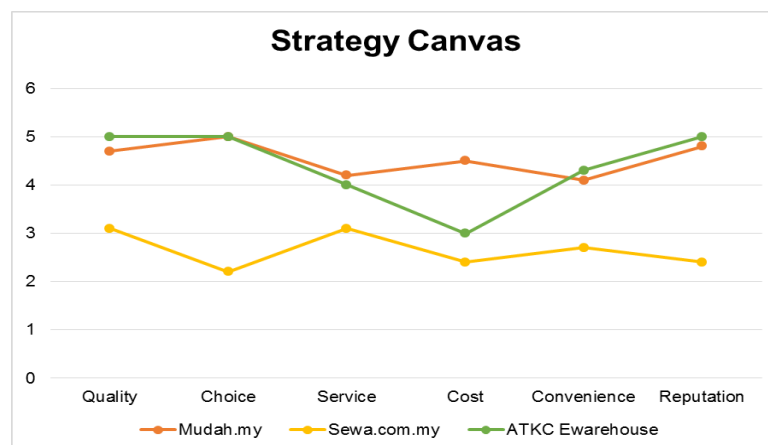


**Fig. 4: Strategy Canvas**

## VI. FOUR LENSES OF INNOVATION

As for the Four Lenses of Innovation, it was consisted of Challenging Orthodoxies, Harnessing Discontinuities, Leveraging Competencies and Strategic Assets and Understanding Unarticulated Needs. ToolBuddy continue to see the benefits of the product from the these four lenses as it want to gain more innovative from our competitor and be relevant in the marketplace as the C2C platform or the sharing economy is still a new trends in Malaysia's marketplace.

Therefore, for the first one regarding the challenging orthodoxies, ToolBuddy challenge of its conceptual beliefs and answering some 'why' question as example: *Can we have more customer and scale to international marketplace?* Or *How we want to become number one top app in Malaysia?* Or *How we want to make people use and trust our platform as their own it?* Secondly, ToolBuddy try to understanding the present heading in Malaysia's trend patterns of change. Its saw that big data analysis could change the game right now. Moreover, it's will help also in targeting its targeted customer in give a lot of values to them. Thirdly, ToolBuddy thinks of organization as a portfolio of skills and assets to leverage resources as in any way as much possible as its can including the open innovation. Also in a beginning, its aim to use the bootstrap strategies in order to survive as a new startup business stage.

Lastly, for the last four lenses of innovation, ToolBuddy learns a lot from its targeted customer and know what they're really want and needs. As for that, a long term strategies in asking for feedback, observation and survey will keep on update from the beginning stage until the mature stage, its want to understand neither customers really love it or its need to improve a lot from our product.

## VII. ENVIRONMENT MAP

A megatrends is a large, social, economic, political, environmental or technological change that is slow to form. Once in place, megatrends influence a wide range of activities, processes and perceptions, both in government and in society, possibly for decades. [8]

### A. Key Trends:

According to Frost and Sullivan (2015), *"Sales from online retail (eTail) to grow seven-fold to US $6.1 billion in 2020, riding on the high smartphone and internet penetration, along with rising disposable, income in Malaysia" (p.14)* [9]. It shown that online retail and also the e-commerce is growing every year regarding the using of smartphone and 4G internet in our society. Therefore, more companies are building and developing using e-commerce business model because they soon saw a big opportunity for company to gain more revenue and profit from online sales. Nowadays, it has becoming new trends, most entrepreneur are encouraging to shift from offline to online retail and e-commerce.

### B. Market Forces:

The internet users are the most common people who using of the mobile application and they are connected each other by a mobile device. Most common people most likely to choose mobility and connectivity. Mobility can be defined as meeting the need of the society to move freely, gain access, communicate, trade and establish relationships without sacrificing other essential human or ecological requirements today or in the future [10]. Therefore, using mobile application in a mobile device especially smartphone are expected to be more easy, more accessible, and more freedom for establishing relationships in sharing economy environment nowadays and in future.

### C. Macro-economic Forces:

The mobile app market is growing faster than could have been expected. Every mobile devices are connected to the internet connection, and because of the new technology being develop every month, it is expected that the number of internet users in Malaysia is increasing nowadays. According to Frost and Sullivan (2015), *"The internet economy (iGDP) market is expected to contribute 16% (US $90 billion) to the GDP by 2025, up from 4.3% in 2010 as the importance of internet and digitally-connected solutions grows in the economic" (p.13)* [9].

### D. Industry Forces:

According to Reportlinker (2017), *"Over the forecast period (2016–2020), the Malaysian construction industry is expected to continue to expand in real terms, supported by the government's plan to improve the country's transport network and tourism infrastructure, and increase the volume of renewable projects."* [11]. Moreover, government efforts

will help the industry to grow over the next five years which this growth was supported by the 10th Malaysia Plan 2011-2015. Therefore, it is a good opportunity not to be missed for future of mobile app development regarding tools and equipment sector.
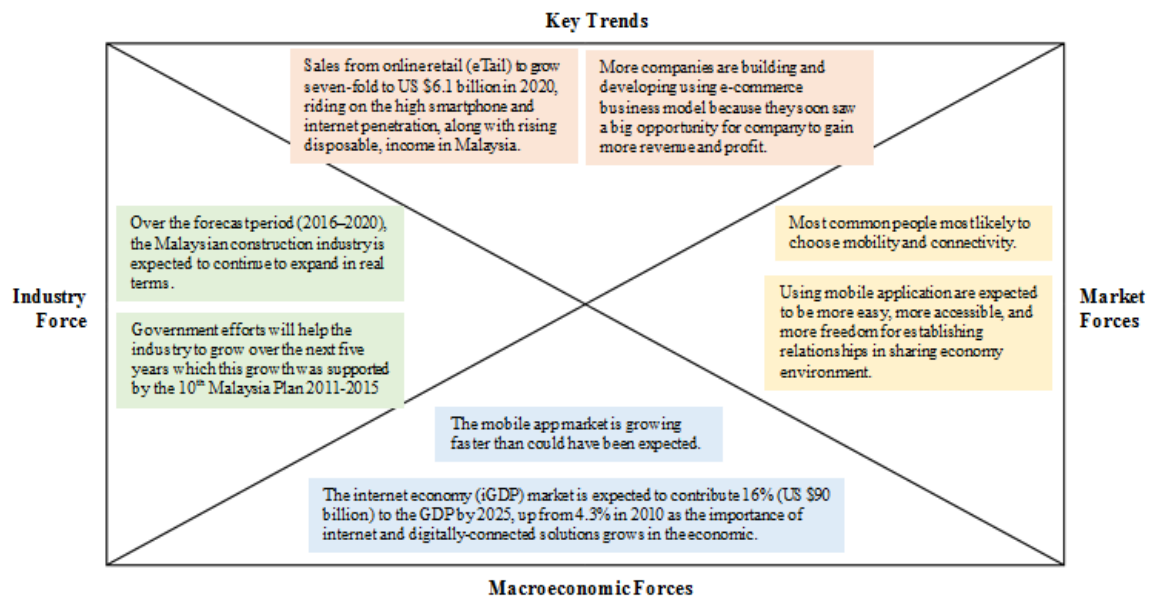


**Fig. 5: Environment Map**

## VIII.   INITIAL BUSINESS MODEL CANVAS

The Business Model Canvas (BMC) was initially proposed by Alexander Osterwalder (2010) [12]. It is a strategic management and lean startup template for developing new business models. It is a visual chart with elements describing a value propositions, customer segment, channels, customer relationships, key activities, key resources, key partners, cost structure, and revenue streams. According to Figure 6, Figure 7 and Figure 8 below, it shows the initial business model canvas (BMC) of ToolBuddy by 3 different options.

### A.  Option 1:

| Key Partners | Key Activities | Value Propositions | Customer Relationships | Customer Segments |
|---|---|---|---|---|
| - Lenders (People with their own tools or equipment)<br>- Payment processors (*MolPay* or *iPay88*)<br>- Investors (*ANGKASA, TERAJU, Goverment*)<br>- Insurances | - Product Development and Management<br>- Marketing and Customer Acquisition<br>- Customer Support<br><br>**Key Resources**<br>- Technological Platform<br>- Skilled Employees | Renters<br>- Easy experience in of mobile application<br>- Rent for short term from close location<br>- Cheaper price<br><br>Lenders<br>- Can earn money by renting their tools or equipment<br>- Return back guarantee<br><br>Local SME Business<br>- Brand advertising<br>- Free advertising on our app environment | - Social Media<br>- Review, Rating and Feedback System<br>- 24/7 Customer Service<br><br>**Channels**<br>- Website<br>- Mobile App (IOS and Android) | Renters<br>- People who are working on their own home for renovations<br><br>Lenders<br>- People who own a tools or equipment<br><br>Local SME Business<br>- Company who running rental services but don't have space on online |
| **Cost Structure**<br><br>- Technological infrastructure (set up and running costs)<br>- Salaries to Permanent Employees | | | **Revenue Streams**<br><br>Renters - Pay small transaction fee at the end of renting period<br>Lenders - 10% services fee to rent their tools<br>Local SME Business - Monthly Subscription | |

**Fig. 6: Initial Business Model Canvas (BMC) ToolBuddy**

*B. Option 2:*

| Key Partners | Key Activities | Value Propositions | Customer Relationships | Customer Segments |
|---|---|---|---|---|
| - Lenders (People with their own tools)<br>- Payment processors (*Paypal, etc*) | - Product Development and Management<br>- Marketing and Customer Acquisition | Renters<br>- Easy experience<br>- Rent for short term<br>- Cheaper price<br><br>Lenders<br>- Extra income by renting their tools<br>- Return back guarantee<br><br>Business' Owners<br>- Brand awareness<br>- Free banner Ads | - Social Media<br>- Review, Rating and Feedback System | Renters<br>- People who are working on their events managements<br><br>Lenders<br>- People who own a tools<br><br>Business' Onwer |
| | **Key Resources**<br><br>- Technological Platform<br>- Skilled Employees | | **Channels**<br><br>- Website<br>- Mobile App (IOS and Android) | |

| Cost Structure | Revenue Streams |
|---|---|
| - Technological infrastructure (set up and running costs)<br>- Salaries | Renters - Pay small transaction fee at the end of renting period<br>Lenders - 30% services fee to rent their tools |

**Fig. 7: Initial Business Model Canvas (BMC) ToolBuddy**

*C. Option 3:*

| Key Partners | Key Activities | Value Propositions | Customer Relationships | Customer Segments |
|---|---|---|---|---|
| - Lenders (People with their own tools or equipment)<br>- Payment processors (*MolPay* or *iPay88*)<br>- Investors (*ANGKASA, TERAJU, Goverment*)<br>- Corporate Sectors<br>- Network of Mosque (NOM)<br>- Insurances<br>- Delivery Services | - Product Development<br>- Marketing and Customer Acquisition<br>- Customer Support | Renters<br>- Easy to use of mobile application<br>- Rent for short term from nearby location<br>- Cheaper price compared to purchase for new items<br><br>Lenders<br>- Can earn money by renting their tools or equipment<br>- Return back 100% guarantee, if not, get the money back<br><br>Business' Owners and Corporate sectors<br>- Brand advertising<br>- Free advertising for new customers acquisition | - Social Media<br>- Review, Rating and Feedback System<br>- 24/7 Customer Service | Renters<br>- Undergraduate's Students, Postgraduate's Students, Teachers, Lectures and etc.<br><br>Lenders<br>- People who own a tools or equipment<br><br>Business' Owners and Corporate sectors<br>- Company who running rental services but don't have space on online enviroment |
| | **Key Resources**<br><br>- Technological Platform<br>- Skilled Employees | | **Channels**<br><br>- Website<br>- Mobile Application (IOS and Android) | |

| Cost Structure | Revenue Streams |
|---|---|
| - Technological infrastructure (set up and running costs)<br>- Salaries to Permanent Employees | Renters - Pay 5% transaction fee at the end of renting period<br>Lenders - 20% services fee to rent their tools<br>Business' Owners – Premium Lifetime Subscription |

**Fig. 8: Initial Business Model Canvas (BMC) ToolBuddy**

## IX.   INITIAL VPC

The value proposition is one of the strategic management and execution tools to understand the customers' needs and design the products and service according to customers' satisfaction. [13]. There are three values proposition canvases, which are for renters, lenders, and business owners. The canvases consists of value map and customer profile has been created. These three customer segments have different problems, needs and attentions of using the application. Moreover, the reason doing these different values proposition canvases because it can help business owner to figure out from the mind of customer and how to give a suitable values that can meet their satisfaction in real life.

**Option 1**

*A.  Initial VPC – Renters*
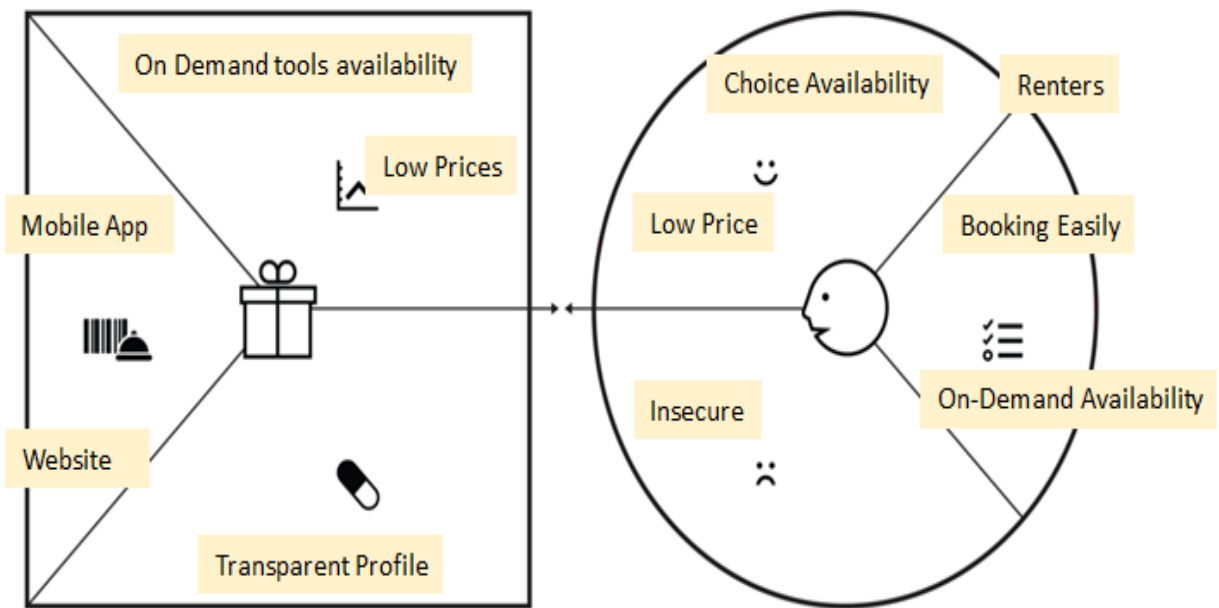


**Fig. 9: Initial value proposition canvas for Renters**

*B.        Initial VPC – Lenders*
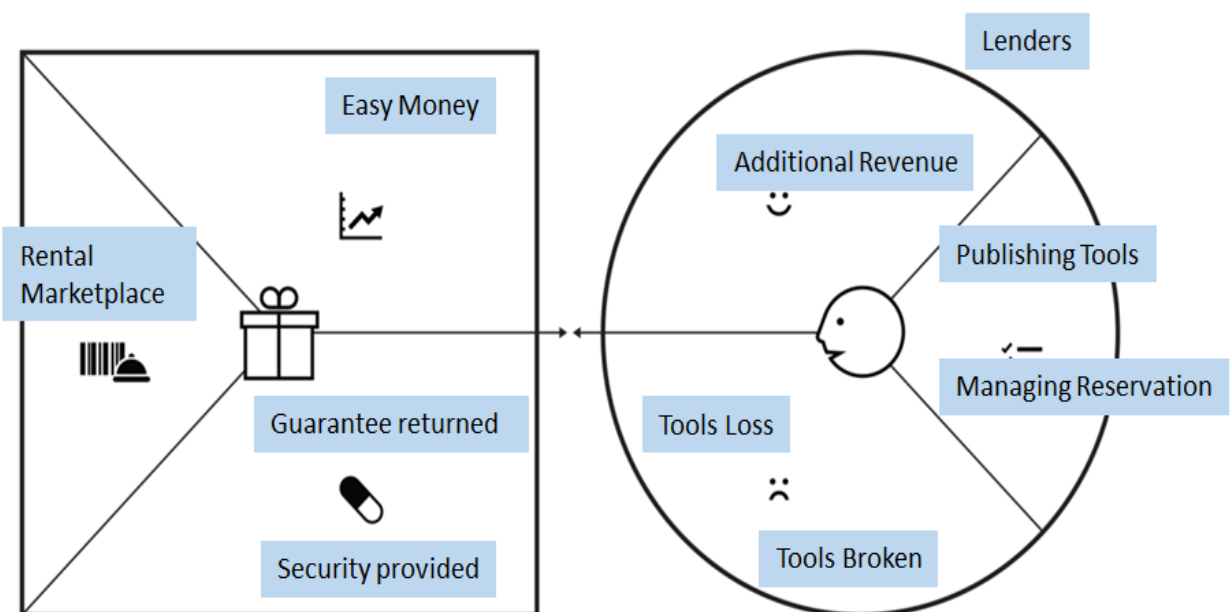


**Fig. 10: Initial value proposition canvas for Lenders**

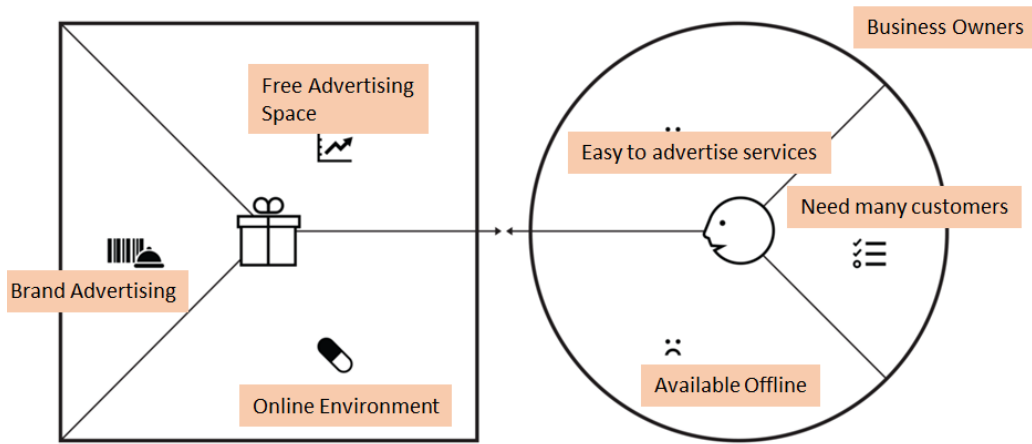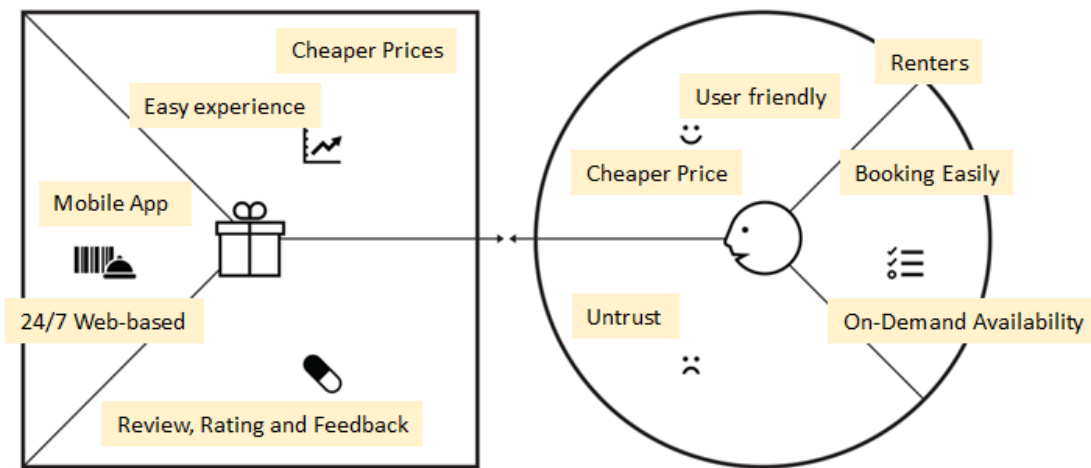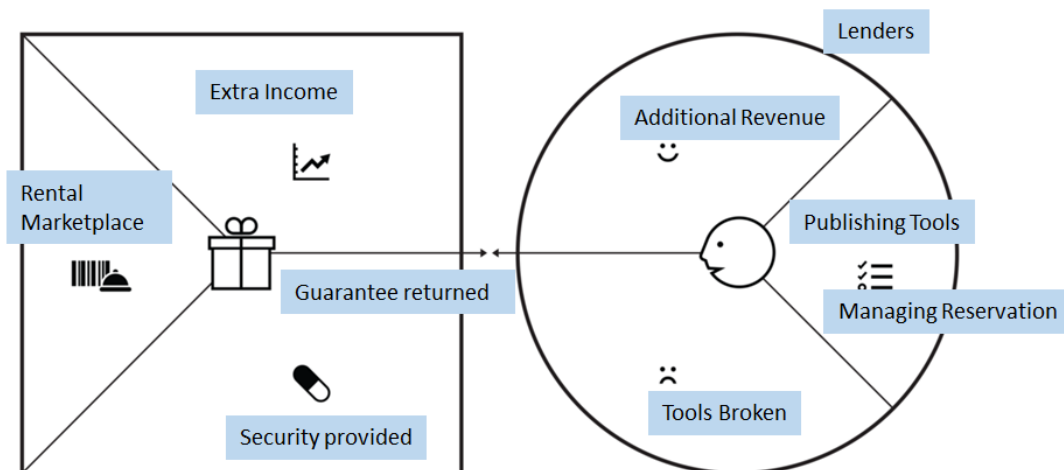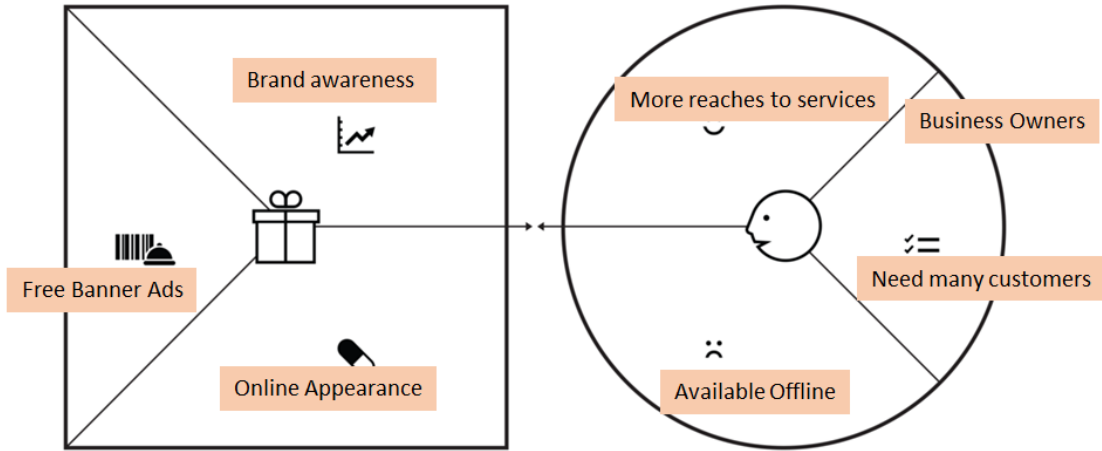### C.    *Initial VPC – Business Owners*



**Fig. 11: Initial value proposition canvas for Business Owners**

## Option 2

### A.    *Initial VPC – Renters:*



**Fig. 12: Initial value proposition canvas for Renters**

### B.    *Initial VPC – Lenders*



**Fig. 13: Initial value proposition canvas for Lenders**

*C.*     *Initial VPC – Business Owners*



**Fig. 14: Initial value proposition canvas for Business Owners**
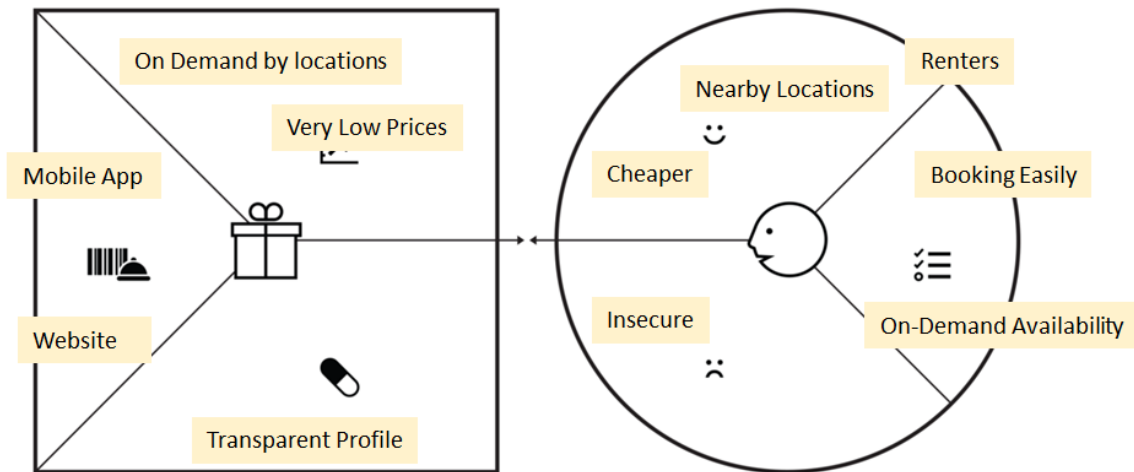
**Option 3**

*A.  Initial VPC – Renters*



**Fig. 15: Initial value proposition canvas for Renters**
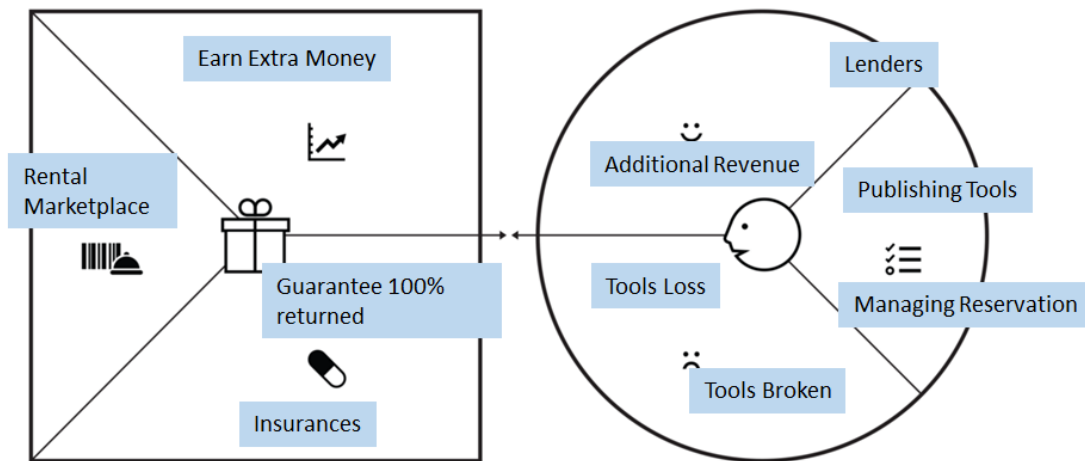
*B.  Initial VPC – Lenders*



**Fig. 16: Initial value proposition canvas for Lenders**

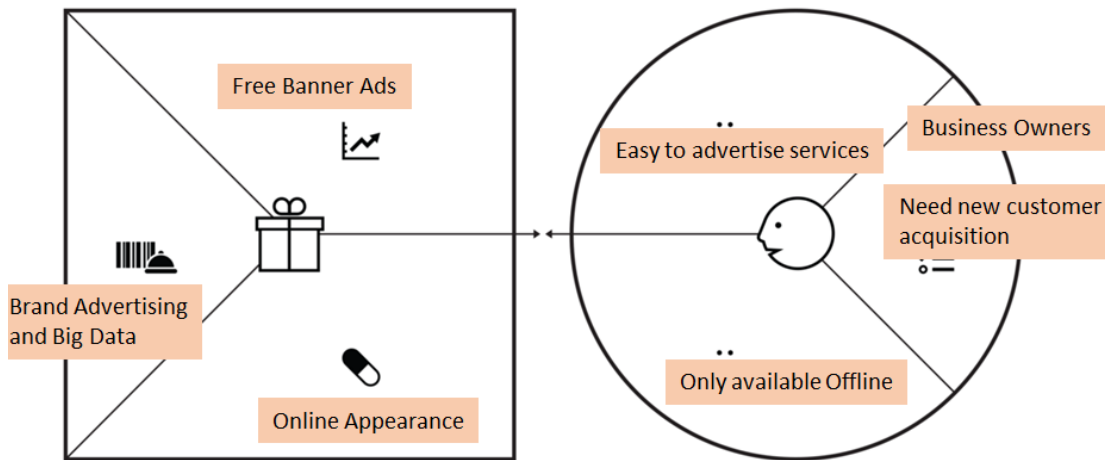### C. *Initial VPC – Business Owners and Corporate Sectors*



**Fig. 17: Initial value proposition canvas for Business Owners**

## X. VALIDATION OF INITIAL BUSINESS MODEL

**Interview And Questionnaire Result:**

A research have been conducted through interview and questionnaire to get the real information and data from the targeted customer segments of ToolBuddy. The results will help to enhance the business model ideas and also the value propositions before developing the business plan and entering the real market.

The sets of questionnaire survey were distributed personally to the targeted customer segments by emails and messages, and requested the respondents to give a real situation feedback from their experience. Moreover, the interview was conducted in their places and they been requested to answer the same questions as the survey, but all the answers were recorded in two types such as written form and also the audio recording.

From Figure 18, it shown that 73.7% said that they have an experience in using mobile application for peer-to-peer marketplace and another 26.3% of the respondents never have an experience in using this type of mobile application. Survey shows that most of our respondents are tech savvy and have some idea on how technology can make their daily activities much better and faster.
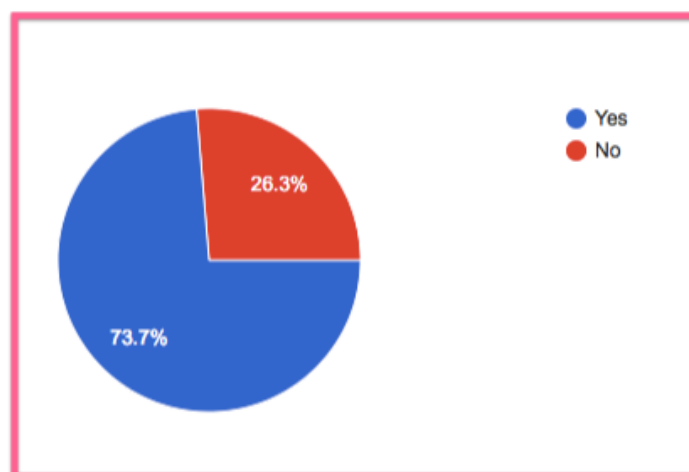


**Fig. 18: Experience in using mobile application**

In the meantime, questionnaire shows that the most type of features that most users want is easy experience in searching and booking tools or equipment, followed by cheaper price based on daily and weekly rate and rent for short term from close location. Some respondents stated that their feels insecure if the application's features doesn't shows a transparent profile, review, ratings and feedback of the lenders.
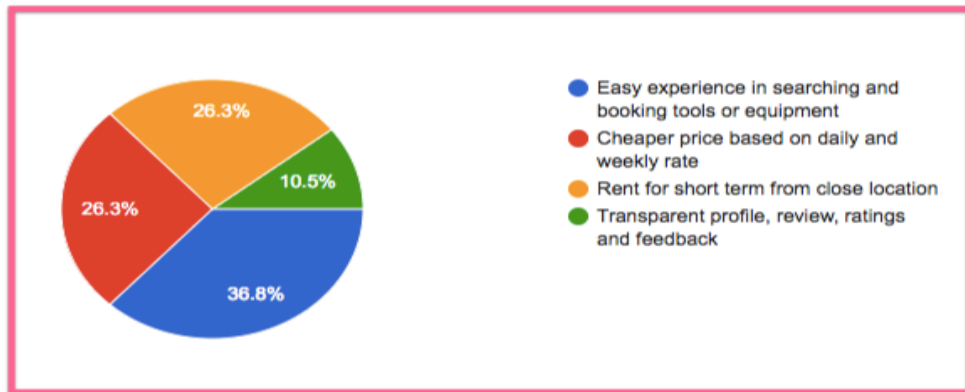
**Fig. 19: Type of features**

The result from the customers survey in the Figure 20 shows that about 42.1% from the customers want to earn extra money more than RM2,000 per month if they can rent their own tools and equipment as they didn't used it all the time, while another 26.3% want to earn RM1,000 per month, another 26.3% want to earn extra RM500 every month and 5.3% that want to earn below RM100. Thus, it shown that lenders are really eager to earn some additional revenue from lending their tools or equipment to other people every single month.
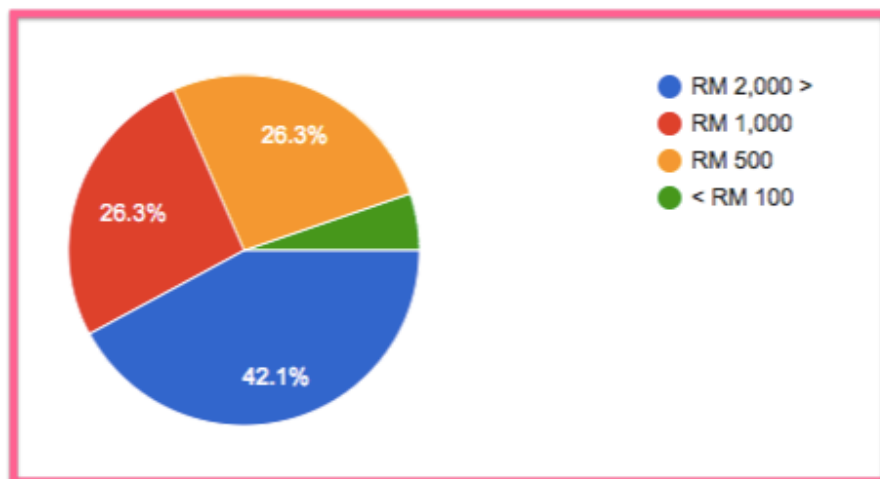


**Fig. 20: Amount earning extra money**

Based on the Figure 21, the highest constraints faced by the customer are return back guarantee of the items as well as the insurance provided if the item damaged or not return back. It's not as high as delivery service from third party. Lenders are more concern if the item are broken, damaged and also didn't received back after been rented.
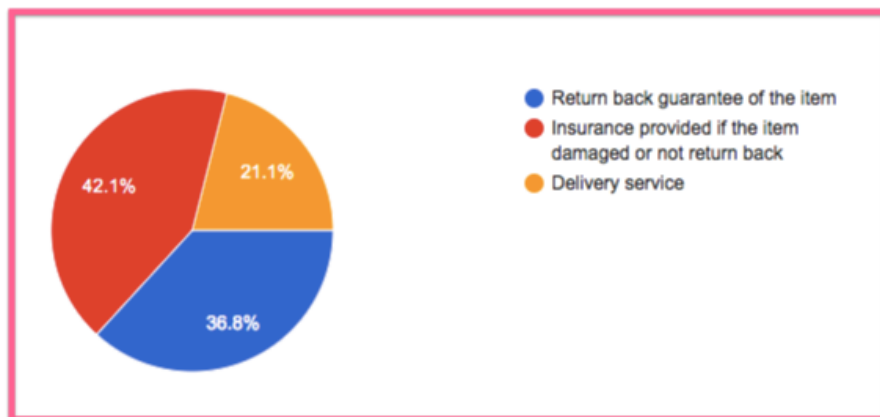


**Fig. 21: Type of constraints**

# XI. CONCEPTUAL SOLUTION

Based on the interview and questionnaire result, the conceptual solution which are Business Model Canvas and VPC are being enhancement to be made more specific and more relevant on what matter for the business solution. The targeted customer segments been made more specific for focusing more on tech savvy people that have experience in using technology. Other than that, the value proposition canvas (VPC) is improved from previously that become more customer-centric. The enhanced Business Model Canvas (BMC) is as in Figure 22. Some changes to customer segments, channels, value propositions, key activities, key resources, key partners and also cost structure have been made. The others are remain the same. Figure 23, Figure 24 and Figure 25 shows the value propositions canvases for enhancement VPC.

**Enhancement Business Model Canvas**

| Key Partners | Key Activities | Value Propositions | Customer Relationships | Customer Segments |
|---|---|---|---|---|
| - Lenders (People with their own tools or equipment)<br>- Payment processors (*MolPay* or *iPay88*)<br>- Investors (*ANGKASA, TERAJU, Government*)<br>- Insurances (*Takaful*, etc)<br>- Delivery services | - Product Development and Management<br>- Marketing and Customer Acquisition<br>- Hiring lenders<br>- Customer Support<br>- Web and Mobile application enhancement<br><br>**Key Resources**<br><br>- Technological Platform<br>- Local Lenders<br>- Skilled Employees | Renters<br>- Easy experience in searching and booking tools or equipment<br>- Excellent customer experience<br>- Rent for short term from close location<br>- Convenient and cheaper price based on daily and weekly rate<br>Lenders<br>- Extra income by renting their tools or equipment<br>- Return back guarantee in same condition<br>- Insurance up until RM1,000 if item damaged or not returned<br><br>Local SME Business<br>- Brand advertising<br>- Free advertising | - Social Media<br>- Review, Rating and Feedback System<br>- 24/7 Customer Service<br><br>**Channels**<br><br>- Website<br>- Mobile App (IOS and Android)<br>- Network of Mosque (NOM) | Renters<br>- Tech savvy people who are working on their own home for maintenance or doing renovations<br><br>Lenders<br>- People who own a tools or equipment and want to earn extra money<br><br>Local SME Business<br>- Company who running rental services but don't have space on online |
| **Cost Structure**<br><br>- Technological infrastructure (set up and running costs)<br>- Salaries to Permanent Employees<br>- Launch events and Marketing Expenditure<br>- Costs to execute key activities | | | **Revenue Streams**<br><br>Renters - Pay small transaction fee at the end of renting period<br>Lenders - 10% services fee to rent their tools<br>Local SME Business - Monthly Subscription | |

**Fig. 22: Enhancement Business Model Canvas ToolBuddy**

*D. Customer Segment:*

As in Figure 14, the segments that been targeted by ToolBuddy are from there customer segments which are Renters, Lenders and Local SME Business' Owners.

*E. Value Proposition:*

ToolBuddy aims to provide value of easy experience in searching and booking tools or equipment, excellent in customer experiences, can rent for short term from close location, and have a convenient and cheaper price based on daily and weekly rate for the renters. Besides, the Lenders can earn additional revenue of extra income by renting their tools or equipment with a return back guarantee in same condition and insurance up until RM1,000 if item damaged or not returned. On the other hand, the Local SME Business's owners can have brand and free advertising on the application environment.

Page | 126

### F. Channels:

The value propositions are been delivered through three channels including responsive website, mobile application neither IOS or android device and also use the concept of *Network of Mosque* (NOM). [14]

### G. Customer Relationship:

In order to have consistent customer relationship, ToolBuddy provided 24/7 customer services if the customers have any problem regarding the application. Besides, it also give the opportunity for users to view the profile, review, rating and feedback from other users. In addition, the social media presence also make easily for the customer to ask and request any feedback from the company.

### H. Key Resources:

Key resources describe the assets needed by company to assure the business model works properly. Those resources good technological platform, high quality local lenders and very well skilled employees.

### I. Key Activities:

zey activities describe as the activities that must been run to assure that the business are moving towards the goal. All the key activities are consistently on product development and management, encourage marketing and customer acquisition campaign, keep hiring lenders, website and mobile application's enhancement and also provide 24/7 customer support.

### J. Key Partners:

Key partners describe the network of supplies and partners that make the business model work. In this case, Toolbuddy partner included lenders (people with their own tools or equipment), payment processors (*MolPay* or *iPay88*), investors (*ANGKASA, TERAJU, and Government*), insurances companies (*Takaful*, etc), and also delivery services providers.

### K. Cost Structure:

Cost structure explains all the costs and expenses that company must be spent to make sure that company have a good products and the business can grow exponentially. For ToolBuddy the costs are for set up the technological infrastructure, pay the salaries to permanent employees, and launching an events also all the marketing expenditure and costs to execute the key activities.

### L. Revenue Stream:

This ToolBuddy platform will get revenue from renters as all the renters need to pay small transaction fee at the end of renting period, also from lenders which have 10% services fee to rent their tools. On the other hand, the local SME Business' owners are charges by monthly subscription. Revenue stream itself explains the revenue need and will be generated from the business.
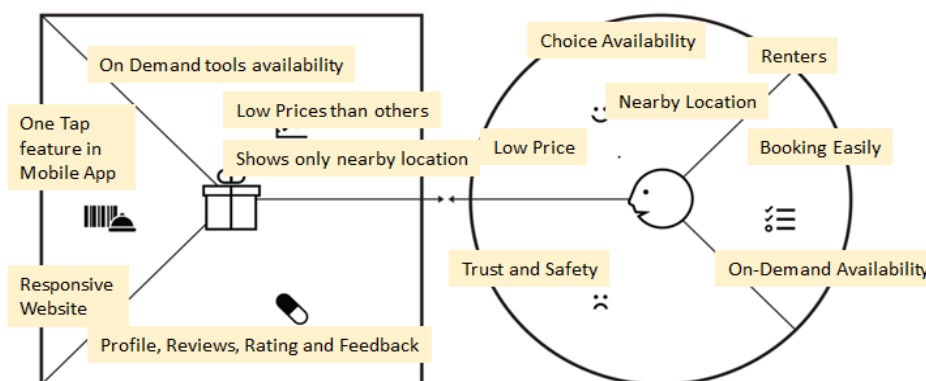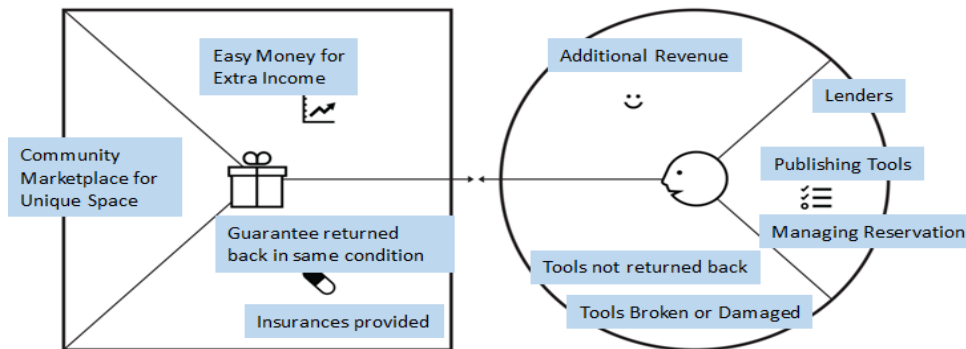
## XII. ENHANCEMENT VPC

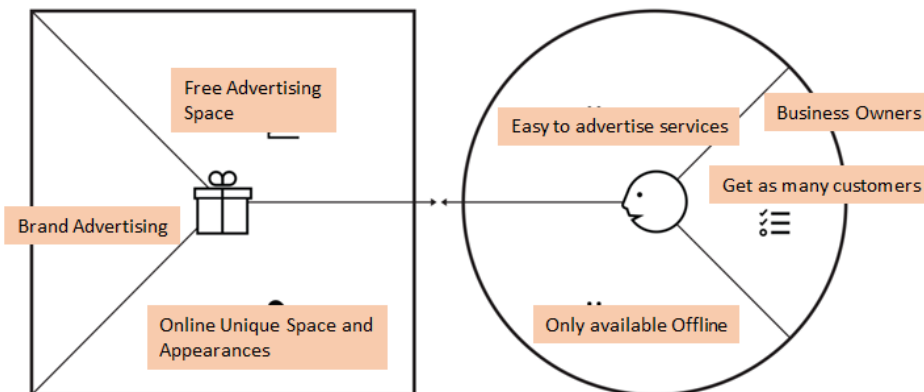### A. Enhancement VPC – Renters



**Fig. 23: Enhancement value proposition canvas for Renters**

*B.      Enhancement VPC – Lenders*



**Fig. 24: Enhancement value proposition canvas for Lenders**

*C.      Enhancement VPC – Business Owners:*



**Fig. 25: Enhancement value proposition canvas for Business Owners**

## XIII.   CONCLUSION AND FUTURE WORKS

In conclusion, this paper has introduced a conceptual solution for today's sharing economy in a peer-to-peer marketplace by providing an online tool-sharing platform. ToolBuddy aims to connect lenders, renters and also the business owners for peer-to-peer sharing of their tools and equipment in short term from a close location. Furthermore, the methodologies used for this paper are literature review, environmental map, business model canvas, value propositions canvas, interview and four lenses of innovation. With the rapid growth of technology nowadays, hopefully that ToolBuddy can be competence enough as a new entrant in the marketplace as proposed for the conceptual solution of C2C online platform. This kind of conceptual solution can give a lot of benefits, advantages and also provides Malaysia with a new values, trends and big opportunities to encourage more online tool-sharing platform for people in Malaysia. In future work and plan, ToolBuddy is going for the next milestone which is to develop a complete business plan for implementation of the action plan together with a good team. ToolBuddy also need to be more align with what real happen around the C2C marketplace in order to become more relevant in the user's choice and more greater of performance services for the users.

## REFERENCES

[1]  Wikipedia Mudah.my, https://en.wikipedia.org/wiki/Mudah.my/ Assessed on 13 October 2017.

[2]  "Winners of NEF-Awani ICT Awards 2011", NEF-Awani, http://www.nef.org.my/v_2010/blog/2012/02/12/winners-of-nef-awani-ict-awards-2011/ Retrieved 9 December 2013.

[3]  About Sewa, http://sewa.com.my/about/ Assessed on 20 October 2017.

[4]  Company's Sewa Details, https://www.equity.pitchin.my/businesses/sewaio-enterprise-sdn-bhd Assessed on 20 October 2017.

[5]  About ATKC Company, https://www.ewarehouse.atkc.com.my/about_us Assessed on 23 October 2017.

[6]  Rental Services ATKC, https://www.ewarehouse.atkc.com.my/rental Assessed on 23 October 2017.

[7]  Media Release ATKC  https://www.ewarehouse.atkc.com.my/media-release Assessed on 26 October 2017.

[8]  The Council of State Government, "Megatrend definition and categories", 2017

[9]  Frost & Sullivan (2015). Mega Trends in Malaysia: Top Mega Trends in Malaysia to 2025 and the Implications to Business, Society, and Culture, 10-47.

[10]  Christine Rosen, "The New Meaning of Mobility," The New Atlantis, Number 31, Spring 2011, pp. 40-46.

[11]  Construction in Malaysia, Key Trends and Opportunities to 2020,   https://www.reportlinker.com/p03488659/ Construction-in-Malaysia-Key-Trends-and-Opportunities-to.html Assessed on 5 October 2017.

[12]  Osterwalder, A. Pigneur, Y. (2010), Business Model Generation. John Wiley & Sons, Inc., Hoboken, New Jersey.

[13]  Osterwalder, A. Pigneur, Y., Bernarda, G. and Smith, A. (2014), Value Proposition Design: how to create products and services customers want. Wiley & Sons, Inc., Hoboken, New Jersey.

[14]  Abdul Rahman, et.al, (2014). *Holistic Development of Human Talent Leveraging On EMaarah Tuition Program through the Network of Mosque (Nom).* IOSR Journal of Research & Method in Education. Volume 4, Issue 3 Ver. IV.

[15]  Abdul Rahman, et.al, (2014). *Event2U e-commerce platform – Enabling mosques as integrated, holistic, comprehensive Centre-of-Excellence in enhancing the Muslim community's wellbeing.* International Journal of Scientific and Research Publications (ISSN 2250-3153), Volume 7, Issue 5.

**AUTHORS PROFILE:**

**First Author** – Muaz Ahmad Faris, Bachelor of Information Technology, Kulliyyah of Information and Communication Technology, International Islamic University Malaysia, muazfaris@gmail.com.

**Second Author** – Mohammad Hafzan Azmir, Bachelor of Information Technology, Kulliyyah of Information and Communication Technology, International Islamic University Malaysia, hafzanazmir@gmail.com.

**Correspondence Author** – Abdul Rahman Ahmad Dahlan, arad@iium.edu.my, 019-2202032.