A CONCEPTUAL ICOOKIES MULTI-SIDED BUSINESS MODEL: BUILD-UP SKILLS, ENHANCE JOB OPPORTUNITIES & ENTREPRENEURSHIP FOR B40 COMMUNITY IN GLOBAL COOKIES BUSINESS

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ABSTRACT: The purpose of this paper is to present a conceptual iCookies business model, with a digital platform and apps, that is aligned with the United Nations Sustainable Development Goals (SDG) in reducing poverty; building-up valuable skills, decent works and entrepreneurship including among the B40s; and in providing consumers with quality & variety cookies worldwide. The B40 community are struggling to find a stable and decent job especially in this pandemic time. Job opportunity with digital platform to start a business will benefit the low-income people and B40s. B40s pains include lack of funds and skills to start the business. As for sellers, the online marketplace will help them promote and market their products. Digital platform will help sellers gain more customers and making higher sales. Trusted platform will help donors make the donation and feel at ease without having to worries about scam or implicit donation. Donors will attract to make donations on the platform as it is trusted for the transparency of the donation process. The Customer Segments in this paper are organizations & individuals who want to buy their favorite cookies locally & globally; cookies sellers who want to promote their cookies; low-income people (B40), underemployed, and unemployed who want valuable and employable in baking cookies; and donors who want to build philanthropic brand on creating employment and companies who want new generation of employees to learn their cookies. This paper highlights the difficulties faced by various Customer segments along with the conceptual solution to overcome the difficulties. Poverty among B40s (SDG1 - No Poverty), hunger faced by the B40s (SDG2 - Zero Hunger) and unemployment challenges are among the obstacles or significant problems identified (SDG8 - Decent Work and Economic Growth). The key problems were identified, and suitable conceptual solutions were created using the Design Thinking (DT) technique. This process includes completing a literature review, testing, and questionnaires to identify and describe the issue of segments, as well as brainstorming, and testing potential solutions. The methodology adapted for this paper is based on the Design Thinking process using literature review, biz modelling tools namely Business Model Canvas (BMC) and Value Proposition Canvas (VPC), and survey. This paper intends to help the consumer to enjoy variety of cookies around the world and help cookies seller by providing the online platform. Moreover, the B40 people will gain a skill and get job opportunity to make
income. Last but not least, the donors can make their donation without any worries.

**KEY WORDS:** Cookies Store, Employment, B40s, Multi-Sided Platform, Business model canvas, Design Thinking

1. INTRODUCTION

The emergence of COVID-19 has brought new problems to everyone on the globe. Malaysia is not exempted to the norm these days, which has an impact on all people's thoughts, particularly those in B40[1]. It has an impact on people's lifestyles since the new Standard Operating Procedure (SOP), movement limitations, and lockdown throughout all nations make it more difficult for low-income families to live. Innovative measures, such as entrepreneurship using online platforms to generate income should be improvised. Our target is people from Asnaf and B40s categories. This group of people is chosen by us because most of them are affected by the pandemic. Based on the Department of Statistics (DOSM) Household Income and Basic Amenities (HIS/BA) survey of 2019 there are 40% of B40s people in Malaysia [2]. Due to travel restrictions and concerns about contagious sickness, people are increasingly turning to e-commerce platforms to purchase their daily necessities, commodities, and food.

The conceptual model of iCookies online business platform is to help people sell their cookies from all over the world is available on this platform. It is aligned with the United Nations (UN) Sustainable Development Goals (SDG) aimed at improving the planet and the quality of human life around the world by the year 2030 in no poverty goals, no hunger and decent work and economic growth. Customers have an opportunity to choose a variety of cookies to be delivered to them. Moreover, they can make donations through this platform while purchasing their cookies.

Cookies which are crunchy with balanced sweetness are every people's desire [3]. Nowadays, most cookies in the market are either too sweet or easily sluggish. Situations like this make people lose interest in cookies. Often these desserts come in a similar flavor such as chocolate chips. As the normal desserts are getting boring for the people, they can seek a new kind of satisfaction for sweets with a variety of cookies with different flavors. They have to order it online and wait 3-4 business days before it comes. Most people lose their cravings even before the product comes. People needs the best quality of cookies available and ready to consume.

The existence digital platform will benefit not only the customers who require services, but also the sellers, such as any freelancer who bake homemade cookies. The broaden scope of the event by partnering with businesses that can assist in making it a success. Some of the world-famous cookies are Qashat al-Narjeel (Gluten-Free Arabian Coconut Cookies) from Omen, Nan-e Berenji (Rice Cookies with Rosewater and Cardamom) from Iran, Ma'Amoul Bil Tamer (Date-Filled Semolina Shortbread Cookies) from Lebanon and Yak Kwa (Honey-Dipped Ginger Cookies) from South Korea [4]. Certain cookies from other countries are not halal and might be problem for Muslim's consumers.
2. BACKGROUND

In the current marketplace, based on our observation aside from social media, people are selling cookies through e-commerce platforms such as Shopee and Lazada. Certain kinds of cookies are only available at some convenient stores and limited for certain quantities only. The current e-commerce platform does not focus on cookies only but thousands of other products. This digital platform is created exclusively for selling the variety of cookies which are fresh and quality. This platform also offers a wider range of customers to be reached by the sellers to promote their various kinds of cookies. The products offered are various choices, high quality and fresh to be consumed. The people from B40 have a better opportunity to expose themselves in entrepreneurship by optimizing the internet and digital usage. The goods placed at physical stores might be exposed to Covid-19 virus. Moreover, the goods can be damaged in the delivery process and could expire in a certain time. The low-income people (B40) lack knowledge and funds for them to start business online. Lastly, the donors need a trusted platform where they could make a donation without having to worry about where the donation money will be spent (Ahmad Dahlan et al., 2021). This is where digital business model like iCookies will be solutions to their problems.

3. OBJECTIVES

The main objectives of iCookies are:

- To provide global cookies and choco jar with the best recipes that will satisfy customer’s taste.
- To offer a variety of unique flavors from all countries in the world instead of typical flavors.
- To customize our products to the needs of our customers.
- To provide customers with affordable prices
- To provide a platform for the B40s to improve their skill.
- To provide trusted platform for donors to donate without any worries.

4. METHODOLOGY

This paper adopts the Design Thinking Methodology which focuses on five stages which are empathizing, defining, ideate, prototyping and testing. Basically, in the Business Model Canvas (BMC), the customer segment is empathized to really understand the problem faced by them. It is followed by reviewing solutions that exist and the problem root. Which usually came from a company that produced the same service. These will be the benchmarking of the business to follow. To further understand the customer, an online survey is distributed to gain information to help develop the BMC. BMC is the main tool used in the paper followed by Value Proposition Canvas (VPC), Environment Map (EM), and Strategy Canvas as supports. Defining the problem faced phase is to develop the idea or product of the business. Value proposition segment is the ideate phase of the methodology. It emphasizes the problem to match with the value given by the business. The EM is to help determine how the business runs. It takes many factors such as market forces, key trends, industry forces, and macroeconomic forces. In prototyping, the initial BMC and VPC is improved. The data gained in the survey is the main key to improve the tools. And the final stage is testing which done through deploying the
prototype. By adopting this methodology, the business will produce value to the customer or consumer according to their needs.

**A. Business Model Canvas (BMC)**

The Business Model Canvas is the overview of the business model. It consists of 9 segments which are Customer Segment, Customer Relationship, Channel, Value Proposition, Key Activities, Key Resources, Key Partners, Cost Structure, and Revenue [6].

**B. Value Proposition Design Canvas (VPC)**

The Value Proposition Canvas is a tool which can help identify customer Gains and Pains and to be able to lay out Gain Creator and Pain Reliever [7].

**C. Strategy Canvas**

The Strategy Canvas is essential to formulate a competitive strategy against other similar businesses in the same industry [13] as iCookies. The business will also apply the global Sustainable Development Goals in its business activities and management.

**D. Environmental Map (EM)**

The environmental Map is to list down the external factors that are possible to regulate or influence how the business runs. It is a tool to help define specific questions that can uncover new business model ideas [14].

5. **LITERATURE REVIEW**

5.1. **Unemployment Rate**

Malaysian unemployment rate is averaging at 4.5% as of July 2021. As Malaysia has achieved 80% vaccinated population, many sectors are expected to reopen. Many governments’ initiative has been deployed such as The Wage Subsidy Program (PSU 1.0) under PRIHATIN and PENJANA [15]. However, the pandemic is not near to the end, all business is to be operating under strict SOPs.

5.2. **Unskilled B40**

The pandemic of Covid is leaving the B40s unemployed. Many factors need to be elaborate to understand the root of this problem, one of them is unskilled or unprepared B40. Many job opportunities nowadays have tight requirements, which leave the unqualified B40 unemployed. The government is pushing to upskill the B40 through various methods. Including, collaborating with many parties to provide skill to the unemployed.


5.3. **Industry 4.0**

As the industry keeps on evolving, today’s economic have reach its peak phase which is industry 4.0. The phase is pushing the internet of things to be adapted in all industry, including the food & beverages industry. In line with the phase itself, the business which to adopt the internet of things is to become globally competence with other known brands.
5.4. Supply and Demand of Cookies in Malaysia

In 2020, the sales value of manufactured biscuits and cookies in Malaysia was 2.14 billion Malaysian ringgit. The manufacturing value of biscuits and cookies had been declining since 2017.

![Fig. 1. Sales value of manufactured biscuits and cookies in Malaysia from 2012 to 2020](image)

5.5. Benchmarking

5.5.1. Subway

Subway is one of the largest franchises all over the world for fast food restaurants. It is mainly known for its sandwiches and salads. It is also called Subway Sandwiches. Two people, Fred De Luca and Peter Buck in 1965, founded this restaurant. Subway Cookies are soft and chewy cookies studded with white chocolate chips and macadamia nuts. Inspired by Subway white chocolate macadamia nut cookies, they are perfect to add to your cookie baking rotation!

![Fig. 2. Web interface of Subway (subwayisfresh.com.my)](image)
5.5.2. Kitakerja.my

kitakerja.my is a work of two young Malaysians who see post pandemic conditions as a hell for b40s. The website collects data of users who want to help themselves to find jobs. With limited resources, kitakerja.my is struggling to make Malaysian B40s employed. While the platform focuses on skilled people, the platform focuses on giving training beforehand.  
https://dailystraits.com/2021/08/24/helping-b40s-find-jobs/

![Web interface of Kitakerja](image)

Fig. 3. Web interface of Kitakerja (kitakerja.my)

5.5.3. Famous Amos

Famous Amos was incorporated in Malaysia as a private limited company under the Companies Act, 1965 on 9 November 1983. It is the franchise holder of "THE FAMOUS AMOS C.C.C.C.(M) SDN BHD" in Malaysia. It was acquired by DKSH Holdings (Malaysia) Berhad in January 1997. By using the best ingredients, like semi-sweet chocolate chips and flavorful nuts, these homemade tasting cookies became famous just by word of mouth. It has "Soft & Chewy Cookies" with variety of flavor for cookies lovers who indulge in freshly baked soft cookies. Muffins, Brownies, Chocolate, Confectionery pick and mix are complementary products commonly found in Famous Amos outlets. Readily packed and customized gifts hampers are also ever available.
6. INITIAL BUSINESS MODEL

6.1. BMC

Fig. 5. Business Model

<table>
<thead>
<tr>
<th>Key Partner</th>
<th>Key Activities</th>
<th>Value Propositions</th>
<th>Customer Relationship</th>
<th>Customer Segments</th>
</tr>
</thead>
<tbody>
<tr>
<td>PARTNER</td>
<td>Baking</td>
<td>- Promoting product through our platforms to reach target audience faster &amp; effectively</td>
<td>- Return policy</td>
<td>CONSUMERS</td>
</tr>
<tr>
<td>- IIUM Kiosk</td>
<td>- Packaging</td>
<td>- Online services</td>
<td>- Customer services</td>
<td>- Students</td>
</tr>
<tr>
<td>- Mahallah Cafe</td>
<td>- Marketing</td>
<td>- Fast delivery</td>
<td></td>
<td>- Chocolate enthusiast</td>
</tr>
<tr>
<td>- IIUM Muhadah Foodbank</td>
<td>- Website Maintenance</td>
<td>- Reasonable price</td>
<td></td>
<td>DONORS</td>
</tr>
<tr>
<td>- Petrol Station</td>
<td>- Ingredients</td>
<td>- Variety flavors</td>
<td></td>
<td>- The product will be donated to any foodbank</td>
</tr>
<tr>
<td>- Seller who are using our platform</td>
<td>- Baking utensil sets</td>
<td></td>
<td></td>
<td>SELLERS</td>
</tr>
<tr>
<td>SUPPLIER</td>
<td>- Bakery supplies</td>
<td></td>
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<td>- Using the platform as a medium to run their own business</td>
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<tr>
<td>- IIUM Kiosk</td>
<td>- Ingredients</td>
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<td></td>
<td>B40</td>
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<td>- Grocery Stores</td>
<td>- Packaging materials</td>
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<td>- To receive the donation or to become employees in the business</td>
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<td>- Brand &amp; hashtag</td>
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<td></td>
<td>- Digital platform</td>
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<td></td>
<td>- Staff &amp; partners</td>
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<thead>
<tr>
<th>Key Resources</th>
<th>Value Propositions</th>
<th>Customer Relationship</th>
<th>Customer Segments</th>
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<td>- Ingredients</td>
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<td>- To receive the donation or to become employees in the business</td>
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<th>Revenue Streams</th>
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<tr>
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<td>- Sales</td>
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<tr>
<td>- Packaging</td>
<td>- Donation</td>
<td></td>
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<tr>
<td>- Delivery costs</td>
<td>- Platform subscription</td>
<td></td>
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<tr>
<td>- Website maintenance</td>
<td>- Free</td>
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6.2. VPC

The initial Value Proposition Canvas (VPC) was developed by Dr Alexander Osterwalder (2010) as a framework to ensure that there is a fit between the products and market. There are two parts in the Value Proposition Canvas which are the Customer profile & Value Map. This canvas helps to get more insights between what the customers’ values are and needs. Therefore, the significance of this canvas is to establish the value of iCookies for consumers, B40 people, sellers, and donors. Figure below shows the value proposition canvas for the business model iCookies that is based on the Validated Conceptual Business Model Canvas.
Fig. 6. Value Proposition for Consumers

Fig. 7. Value Proposition for B40
7. VALIDATION OF INITIAL BUSINESS MODEL & KEY FINDINGS

For this project, an online survey to validate and refine have been conducted for business plan. Below is the feedback or responses that have been received from the Google Form survey. Total of 34 respondents from this survey received.
The first question is where we asked users employment status. We found that 55.9% of them are students which is 19 total. 23.5% of them work in the private sector with a total of 8. Lastly, 7 of them are working in the government sector with a percentage of 20.6%.

Moving to the second question, we asked users monthly income. The result showed that 52.9% of respondents had less than RM1500 income monthly. 23.5% of them are on average RM3001 to RM4500. Next, 14.7% of them had RM1500 to RM3000 income monthly. There is no respondent with average RM4501 to RM6000 income monthly. Lastly, 8.8% of respondents had more than RM6000 income monthly.
The next question we asked users is their preferable delivery time when purchasing online. Based on the feedback, 67.6% prefer in the same day. 28.5% of the users are okay with 2 to 3 days delivery time. While only 5.9% can accept 3 to 5 days delivery time.

Next question, we asked the user how to describe a product. Most of them agreed ‘list of ingredients used’ is the best way to describe a product with 41.2% consisting of 14 respondents. Next, 35.3% which is 12 respondents prefer a product to be described with a picture. Lastly, 23.5% with 8 respondents prefer ‘reviews.’
Furthermore, we asked the user how they would like to compare a product. 38.2% with 13 respondents prefer ‘by listing’ while others with the same percentage prefer ‘side by side’. Meanwhile, 23.5% which 8 respondents prefer comparison by ‘rating’.

On top of that, we asked users if they are willing or not to pay to gain audiences. Majority of them are willing to pay, with 73.5% answering ‘yes’ while others are not willing to pay which is 26.5% of the respondents.
The seventh question is about how much a considerable fee is for our platform. Most of the respondents only afford ‘less than RM100’ with a number of 24 respondents (70.6%). Next, 6 respondents (17.6%) can afford ‘RM100 to RM200’. Lastly, only 4 respondents (11.8%) were willing to pay ‘more than RM300’.

Fig. 16. Question 8

Next question is an open question where we asked users’ opinion on any features and functions that they prefer to be included in the platform. These are some of their suggestions, namely: to customize their own flavor, to sell other desserts, prove of where their donation goes, and provide listing of donations made especially by corporation.

Fig. 17. Question 9

The next question we asked users about their expectation on the impact of using this platform. Most of them expect this platform will help the B40s generate income with 47.1% or 16 respondents. Next, 29.4% or 10 respondents think that this platform will help users donate while enjoying cookies at the same time. Lastly, 23.5% or 8 respondents expect this platform only focusing on helping B40s.
Lastly, we asked the users the best form of donation through this platform. 59.4% of respondents prefer to ‘provide entrepreneurship skills to B40s as a form of donation. Meanwhile, the other 40.6% prefer ‘donating cookies for asnaf as a form of donation.

8. VALIDATED BUSINESS MODEL

8.1. Illustrations (Heading 2)

A value proposition is a service or feature that is provided to meet the demands and requirements of a certain customer segment. Anyone who wishes to sell or promote their cookies through our platform could make a subscription to start accessing our platform. Through this platform they could reach more customers worldwide and the delivery service is also more convenient. Meanwhile, the customer is able to choose a quality cookie from world-wide available in our platform.
which guarantee the freshness of the cookies at a reasonable price. The B40 will be able to get the opportunity to learn the skills and get the fund to start a new business. On the other hand, the donor has trusted platform to make a donation easily.

8.2. Customer Segments

The groups of people or organizations we want to engage or provide service are referred to as customer segments. Cookie enthusiasts are among the consumer segments targeted by the business model. Donors who wish to make the donation can choose to do so by requesting the cookies to be placed at the food bank. Cookie’s sellers can use this platform to benefit them by reaching a wider customer range to market their product. B40 can take advantage of this opportunity to earn money by joining the platform to learn new skills like baking, entrepreneurship and marketing.

8.3. Customer Relationship

The type of relationship to build with certain consumer segments is defined as customer relationships. This business model focuses on virtual free learning activities and certifications supplied to people who have been certified by appropriate NGOs that provide the training. Furthermore, third-party cookie sellers might advertise on this platform to lure people to their own products. To coordinate successfully, the advertisement can be posted by contacting the technical development team. The return policies are built in order to protect the customer and make sure they are only provided with the quality product.

8.4. Channels

Channels define how to interact with and reach out to consumer segments in order to deliver the value proposition. Digital tools, such as social media are among the channels to reach out to customers. Courier service is also part of the channel as it could provide better delivery service to satisfy the customers. Partner outlets such as petrol stations, Mosque and IIUM Kiosks are to reach more engagement. Last not but least, iCookies online web platform will be the main channel in order to reach the consumer and to be able to deliver the value proposition.

8.5. Key Activities

This section highlights the key activities that must be completed in order to give value propositions to the various customer categories. The key activities are baking, packaging, branding and marketing through this platform. Aside from that, employing and training of qualified Asnaf or B40 as crew and management partners. Finally, improve and expand the iCookies digital platform.

8.6. Key Resources

The important assets required to ensure that the value propositions are delivered to each consumer segment are known as key resources. An operating room is required to ensure that the products, tasks, and processes are all managed efficiently. Apart from that, there’s recruiting crews with the necessary qualifications and experience to complete specific jobs, provide training or supervision as well as the virtual platform itself, which can be accessed over the internet. Moreover, the utensils, ingredients and the packaging materials are important as well to ensure the quality of the product to be delivered to the customers. Collaboration with
several IIUM societies, such as the IIUM Muhabbah Foodbank, to act as a place to donate the cookies.

8.7. Key Partners

This section outlines the external partners or organizations with whom the value propositions can be executed and delivered as partners. Yayasan Foodbank Malaysia, IIUM Muhabbah Foodbank, selected Mosque in housing area and Petrol station are among the primary partners that provide space for providing cookies. Suppliers are also part of key partners as we choose good suppliers that could supply the quality ingredients for our products.

8.8. Cost Structure

The cost structure highlights the expenses related with developing, maintaining, and delivering the objectives. This covers ingredients, packaging, delivery, maintenance, and salaries.

8.9. Revenue Streams

Customer segments provide the revenue stream. The aim is to cover the operational costs listed in the cost structure. The revenue is generated through sales, donation, and platform subscription.

9. STRATEGIC CANVAS

![Fig. 20. Strategic Canvas](image)

The strategic canvas compares iCookies to other two known brand in the market which are Subway and Famous Amos. These brands are chosen because of its well-known product in the market. However, the strategic canvas shows where the iCookies will be better. The first aspect is the crunchiness of the product. Followed by price, flavor, packaging, online service, and delivery.

10. CONCLUSION AND FUTURE WORKS

In conclusion, iCookies is a web application that acts as an online platform to purchase and sell any kind of cookies. BMC and VPC are used to ensure that the
business project is on track to meet its objective and vision. Furthermore, the project not only delivers commodities, but also provides opportunities for charitable giving to those who are deserving. Using design thinking, business modelling, and strategic planning methodologies, iCookies can be one of the greatest web applications with the biggest demand from customers in the future. Conceptually, iCookies can achieve common objective with United Nations Sustainable Development Goals (SDG). The focused group: B40 will no longer ignored but rather their level of skill will improve alongside their quality of life.

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