# CONCEPTUAL AGRO-BIZMATCH DIGITAL PLATFORM BUSINESS MODEL: CONNECTEDNESS TO ENABLE AGRO-BASED BUSINESSES TO INNOVATE AND GROW

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**ABSTRACT**: This paper offers a conceptual Agro-BizMatch business model to solve the problem encountered by multiple customer segments in finding potential partners and marketplace, innovate, and grow their agro-based businesses. This business concept and platform offers potential benefits to people with existing businesses who need to grow their current businesses, MSMEs, start-ups, entrepreneurs from low-income backgrounds (or B40s), and business mentors who are looking for entrepreneurs to offer their mentorship services. This project is also aligned with several Sustainable Development Goals (SDG), including SDG 1: No Poverty (the poverty rate in Malaysia) and SDG 8: Decent Work and Economic Growth (the employment issue). The Design Thinking (DT) methodology is used to identify problems and devise effective solutions to problems encountered by customer segments when looking for and establishing sustainable business partnerships. To identify relevant information for the proposed business venture, literature reviews were conducted, and interviews with several entrepreneurs were done to gather ideas and understand their requirements for application development. The key aspects of the business challenges, extreme pains, essential gains, and important jobs-to-do - are figured out by using various business modelling tools, such as Business Environment Map (EM), Business Model Canvas (BMC), and Value Proposition Canvas (VPC). The Agro-Bizmatch low-fidelity prototype was designed, developed, and tested to analyze the relevancy and sustainability of the conceptual business model for the various customer segments.

**KEY WORDS:** EM, BMC, VPC, Agriculture, business matching, MSME, business model, B40s

# 1. INTRODUCTION

As the world becomes more digitized, so do people's necessities and pleasures. More and more customers are choosing online shopping other than going to actual stores (Taderhoost & Madanchian, 2023). On a side note, there are

businesses that start selling on the online platform from all sectors but are unable to have opportunities to spotlight their businesses. Some businesses, especially the micro small and medium enterprises (MSMEs) are facing issues such as finding a marketplace, budget for promotion, and production (Prasanna et al., 2019), for example, small businesses involved in the agriculture sector. It is a challenge to promote organic goods with the reason that most of them are from rural areas and searching for a physical market, while advertising will cost money and time (SriRithi et al., 2018). Although many digital platforms have been invented, it is still a bit difficult for businesses to collaborate and build partnerships with other businesses (Zhao et al., 2020). This may be so because most platforms that promote businesses rarely showcase the ones that they assume to be less lucrative and focus on the big and well-known big companies, Multinational Corporations (MNCs), and Transnational Corporations (TNCs) (Prasanna et al., 2019; Chan et al., 2018). Thus, it is a challenge for MSME businesses especially in the agriculture sector to build partnership and collaboration with other businesses within the sectors because of the lack of digital platform specifically for them (Cenamor et al., 2019; Bertello et al., 2021).

Hence, a new digital and trusted platform that can connect start-ups and MSME businesses without getting overshadowed by bigger companies should be developed. A platform that enables and supports agriculture businesses and entrepreneurs to build trusted business connections, creating presence and expanding market reach in the marketplace, providing various resources, and responding to the fast-changing market needs (Solano Acosta et al., 2018). Hopefully, initiatives like Agro-BizMatch Platform can help agro-based businesses in building and expanding their business network and partnerships, innovate, and grow their businesses.

### 2. PROBLEM STATEMENT

The pressing challenges faced by agro-based MSMEs and entrepreneurs are underscored by the need for a comprehensive solution that propels their growth and collaboration within the industry. Despite their potential, these entities encounter barriers in establishing sustainable partnerships with other like-minded stakeholders. The current lack of an efficient and user-friendly platform hinders their ability to identify suitable business partners and seize opportunities for collaboration. Additionally, the absence of a credible and innovative marketing avenue limits their capacity to expand and attract potential investors, hindering their progress in the dynamic agro-based market.

To address these critical issues, this paper sets forth a series of objectives aimed at creating a groundbreaking solution: the Agro-BizMatch conceptual multisided platform business model. This model envisions a digital platform and application designed to empower agro-based MSMEs and entrepreneurs across diverse segments. The primary goal is to enable them to seamlessly explore, connect with, and establish enduring collaborations with like-minded enterprises.

### 3. OBJECTIVES

The primary goal of this paper is to create and offer a conceptual multi-sided platform business model for Agro-BizMatch that includes a digital platform and application. The business model is to provide a platform for agro-based MSMEs and entrepreneurs to seek business partners and establish sustainable collaboration with other agro-based MSMEs and entrepreneurs. The Agro-BizMatch facilitates the search for business partnerships by incorporating essential features such as big data analytics and a seamless user experience. Aside from that, the business model provides a credible and trusted marketing platform for MSMEs and entrepreneurs to innovate and grow their businesses. They will be able to expand the business name on a larger scale by marketing their products and services, increasing the likelihood of bringing in potential investors and partnerships. Aside from that, the business model assists entrepreneurs from low-income backgrounds (B40s) by providing tools and resources that enhance their marketing capabilities. This solution will also indirectly aid in addressing SDG 1: No Poverty by increasing income opportunities for B40 entrepreneurs, thereby reducing the impact of poverty caused by limited market access. Finally, the application makes it easier for business mentors to find MSMEs and B40 entrepreneurs and offer their coaching and mentorship services. By streamlining the mentor-mentee matching process, the platform contributes to SDG 8: Decent Work and Economic Growth by promoting knowledge transfer, skill development, and entrepreneurial guidance, fostering an ecosystem of economic empowerment.

### 4. METHODOLODGY

In this paper, the Design Thinking (DT) methodology is adopted to solve the issues of the proposed business. This problem-solving approach is expected to improve the business by seeking to understand the users, challenge assumptions, redefine problems and create innovative solutions which are iterative and consist of five stages which are empathize, define, ideate, prototype and test (Foundation, Interaction Design, 2022). There are a few tools that are applied in this paper which are Business Model Canvas (BMC), Value Proposition Design Canvas (VPC), Environment Map (EM), and Strategy Canvas (SC). Furthermore, surveys as a data collection method are carried out to collect feedback, opinions and responses from respondents. The following are the list of tools used:

# i. Business Model Canvas (BMC)

This tool consists of nine components to provide a visualization of the business model. It allows business models to be simple, relevant and intuitively accessible, while without oversimplifying the difficulties of how businesses operate. The components are the building blocks of the Business Model Canvas which are Customer Segments, Value Proposition, Channels, Customer Relationships, Revenue Streams, Key Resources, Key Activities, Key Partners, and Cost Structure (Osterwalder & Pigneur, 2010).

# ii. Value Proposition Design Canvas (VPC)

This tool is to create value to the customers by evaluating the customer's Pains and Gains to find the Pain Reliever and the Gain Creator to keep aligned with what customers want (Osterwalder et al., 2014).

## iii. Environmental Map (EM)

In this tool, there are four main areas of the business environment that will help people map their environment's forces in a structured and tangible way. The four areas are market forces, industry forces, key trends, and macroeconomic forces (Osterwalder & Pigneur, 2010).

# iv. Strategy Canvas (SC)

A strategy canvas is a tool that compares the product factors that a sample of incumbent products compete on, based on the value that a particular customer segment receives from them, in a two-dimensional chart (W. Chan Kim and Renée Mauborgne, 2004). By using the Blue Ocean Strategy tool, the business can create uncontested market space and capture a new demand among businesses (Blue Ocean Strategy, 2022).

### 5. LITERATURE REVIEW

# 5.1.Multi-Sided Digital Platform Business Model

Various business frameworks and business models have been developed and innovated over the last two decades. This cutting-edge analysis has explained many critical attributes required to effectively define a business model. The development of new technologies has altered the way businesses operate over the years, making the study of business models in digital marketplaces an important area of research into how to conduct sustainable business in today's digital marketplace (George et al., 2020; Parida and Wincent, 2019). New business model innovations are required for a proper risk management, which necessitates the development of new frameworks for analyzing these models.

A business may do well in the marketplace without any structure or model for a while if the conditions are favorable. But once it encounters any competition or any of Porter's five forces, it may soon collapse if it does not have a proper plan to counteract these competitive forces or if it does not have a business model. In which case, if the business has, it can not only counteract these forces but also run sustainably and efficiently for a longer period of time. Digital technologies, in particular, enable the development of novel business models and provide opportunities for new practices (Hinings et al., 2018; Holzmann et al., 2017; Nambisan et al., 2017; Täuscher and Laudien, 2018).

In this way, the digital marketplace continues to innovate, and the experimentation of new business models can be seen; where previously, only industries such as electricity and telecommunications used this model, but now many companies such as Amazon Web Services use it. Despite the fact that there

are numerous business models available, the majority of successful global startups, including Paypal, Uber, Alibaba, eBay, and Facebook, have adopted the multisided business model. Because of the power of the internet and the digital world, this type of business model has grown in popularity, and it has proven to work well for any startup. both new and established brands (Daniel Pereira, 2022).

The multisided platform business model connects more than two participant groups to a product or service, making it easier for them to find and relate to one another. For a long time, the large corporation Facebook has employed this business model, which includes not only users but also advertisers, content developers, and so on (Azahari et al., 2023; Daniel Pereira, 2022; Azizi et al., 2022).

By facilitating the exchange of goods, services and providing a network, multisided platforms add value to their participants. Sellers can sell their products for a low investment, and buyers can shop from the comfort of their own homes. The transaction platform adds value by allowing both sellers and buyers to benefit. Furthermore, social media and content platforms can provide users with a digital environment while also providing data for the demand side (Daniel Pereira, 2022).

# 5.2. Multi-Sided Digital Platform Business Model

Through 4IR, a context will be established in which the economic systems of the production chain occur both physically and online, merging together into a flexible and continuous system. Internet-based companies will be assisted in developing their smartness and efficiency through 4IR, known as the new Fourth Industrial Revolution. Organizations or companies will have opportunities to use data in real time within supply chains and do businesses in real time as well (Ali et al, 2022). Additionally, 4IR can give businesses a great benefit as it allows for realtime data analysis. Businesses can raise their production levels and competitiveness, as well as becoming more visible and monitor activities on their own. Innovation is essential to businesses, industries, and nations. Therefore, by implementing and following from 4IR, there will be a good opportunity in developing this nation to be using high-tech, thus producing job opportunities in many sectors according to the aims in 4IR, that is to develop Malaysia as a high-tech nation by 2030 (EPU, 2021). In regard to being aligned with the National Policy on Science, Technology and Innovation (DSTIN) 2021-2030, it can enable local technology development by forming new opportunities within 4IR technologies, which can be a great advantage to grow the businesses better.

# 5.3. Existing Business Model, Digital Platform and Application

There are a few business models that have been reviewed. One of them is AllyMatch. AllyMatch is a platform that helps users find business partners online. Allymatch focuses on Business to Business (B2B) as their customers. It promotes a platform for businesses to create partnership among each other, especially enterprise level companies, business networks, economic development organizations, and government offices (Kemmler, Allymatch 2019). Users of this application would not have to travel and can discuss partnership through the

platform. Although AllyMatch focuses on manufacturing, it was designed to help decision making for innovative companies such as manufacturing, research and development, and service providers.

Next is the Tüyap Smart Matchmaking System. It is a system developed by Tüyap Fair and Exhibition Group. Tüyap Smart Matchmaking offers businesses the chance to find the right company for collaboration and partnership. This system is specifically designed by Tüyap for businesses that join the Tüyap Exhibition. They are recommended to take part in the Matchmaking Program by giving information about their objectives and business. Later, these businesses will receive matching companies for partnership and meet up during the exhibition. An application developed by Tüyap includes the updates of fairs and exhibitions along with the Matchmaking System for the businesses to collaborate with each other before the show begins (Smart matchmaking: Tüyap 2017).

Some other applications that have similar functions and features as the Agro-BizMatch Partnership Platform are LinkedIn, Facebook and Shopee. LinkedIn is a platform for professional networking and career development (Pereira, 2022). It works as a resume for users to look for a job and for businesses to market available spots in the company. Facebook offers a platform to build community and connect people. Users can communicate, share, and discover using this platform (Premium products 2020). Shopee is a marketplace for sellers and buyers. It offers users the chance to sell and buy products using this platform (Hendelmann, 2022). Functions such as communicating from both LinkedIn and Facebook can help users to discuss and make a deal with each other about their businesses. Both applications also have description features which help users to know about the other users' accounts and what they offer. On the other hand, the Shopee e-commerce company helps in sighting on how sellers and buyers work online. Features and functions such as business account description, messaging, posting and advertisements can be used as a reference and contributed to the building of the Agro-BizMatch Partnership Platform.

## 5.4. Government Incentives

Based on the National Entrepreneurship Policy (NEP) 2030 published by the Malaysian government, businesses are encouraged to form partnerships with the mind-set of progression, innovation, and expansion. The government itself is prepared to support MSMEs in this endeavor by adopting several approaches such as workshops and scaling current businesses to become even bigger. In fulfilling this mission, partnerships with other businesses is paramount as it enables a business to expand its network and abilities to deliver their products or services to a wider and more diverse range of customers. The NEP 2030 itself highlights several key information and approaches that raise the significance of our proposed business venture, Agro-BizMatch. This goes to show that if it were to be developed, it could possibly help in fulfilling some of the intended objectives of the NEP 2030 policies. By helping existing or future businesses form collaborations, the financial sector in Malaysia can focus on improving and expanding itself to further influence

its surroundings or step onto the global market which is aligned with the NEP 2030's goals and is incentivized by the government.

Therefore, it is quite a good venture to create a platform that helps or promotes this type of activity. As shown in Malaysian Science, Technology, Innovation and Economy (MySTIE) by Academic Science Malaysia (2020), integrating technology into the business or entrepreneurial field is very much incentivized by the government. With the improvement of IT infrastructure in Malaysia and its great impact on digital commerce, doing business online has become an aspiration for many small businesses. Expanding a business' network with one another is beneficial for this goal. MySTIE also expands on the fundamental benefits of utilizing emerging technologies and digitizing traditional processes when doing business or financial services in general. Technology such as ICT can also impact on our proposed solution as well since MySTIE also highlights the usage of technology in the agricultural sector. As our proposed business venture can help in creating connections among businesses in the agricultural field, it can ensure that rural or isolated parties stay connected to businesses located in more populated areas.

# 5.5. Benchmarking of Business Models Using BMC Framework

Benchmarking is a process that allows us to compare the performance of other similar businesses in order to improve the success of our proposed business (F.John Reh, 2022). By doing so, we can highlight the critical aspects that are required to fine-tune our business's efficiency so that we can increase our niche value more effectively than the competitors. This research also enables us to see the business patterns used by existing businesses and how they succeed with them. It also allows us to identify our weaknesses and strengths so that we can correct mistakes and plan strategies for future challenges.

### 5.5.1. Tinder 's Business Model Canvas (https://tinder.com/)

Tinder is a paid subscription-based online dating app known for its swipe and match feature (Ron Lyons, 2021). Founded back in 2012, the app allows users to virtually match singles in their area and around the world. The app requires users to create a profile that includes their current location, gender, age, distance, and gender preferences. The users can then start swiping, and if the other side swipes right, both users are considered matched, and they can start chatting. Although Tinder is free, there are subscription tiers for which users can pay monthly or yearly (Ron Lyons, 2021). The Business Model Canvas of Tinder is shown in Fig. 1.

#### **Key Activities** Value Key Customer **Customer Segment** Proposition Partner Website relationship User can create Get the Users Assistance development their profiles by suggestion of 18+ through the logging through and of users age website Facebook. maintenance based on Self-taught Application A person will location site get the development and interest. and suggestion of Like or maintenance different users dislike the API management based on suggested Maintaining his/her location user's user data and interest. profile by swiping User can swipe Channels **Key Resources** right and the profiles of left the suggested Internet Platform respectively user. They can Network Websites swipe right if Technology Get a they like the match of profile or swipe both users lift to dislike the like each other's profile. profile. Users get matched with both users like each other's profile and can chat with each other. **Cost Structure Revenue Streams** Data maintenance Reservations are free to end users. Development Company charges restaurants flat API design and development monthly and per- reservation fees for Platform their use of the system Extra features Marketing Company charges a transactional fee to Customer service restaurants each time a customer makes a reservation. Company charges a one-time fee to restaurants for installation of on-site terminals and training services. Advertising revenue for restaurants to be featured on its website as part of the promotional program or email marketing

Fig. 1. The Business Model Canvas of Tinder

### 5.5.2. LinkedIn's Business Model Canvas (https://www.linkedin.com/)

LinkedIn is a platform for people who want to advance in their careers. People from various professional backgrounds, such as small business owners, students,

and job seekers, may be included. LinkedIn members can use LinkedIn to connect with professionals, businesses, and groups both within and outside of their industry. By showcasing the users' unique professional story through experience, skills, and education, a complete LinkedIn profile can help them connect with opportunities. Users who want to create and maintain a professional profile online can sign up for a free basic membership on LinkedIn. Upgrading to a Premium subscription will open to additional access to LinkedIn's products and features. The app offers marketing, recruitment, sales, and learning products in the paid subscriptions (LinkedIn, 2022). The Business Model of LinkedIn is shown in Fig. 2.

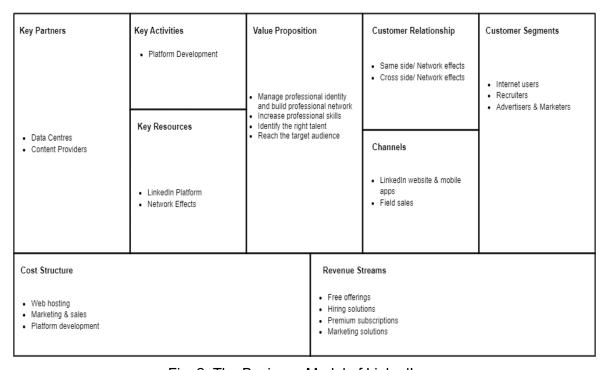


Fig. 2. The Business Model of LinkedIn

#### 5.5.3. OpenTable's Business Model Canvas (https://www.opentable.com/)

OpenTable is an online restaurant reservation service company that was founded in 1998 by Sid Gorham, Eric Moe, and Chuck Templeton. The company sells online tools and services for restaurant reservations and reviews. The company does two things: it sells reservation tools to restaurants and operates an online reservation service on both its own and partner sites. Consumer reservations are free, but restaurants pay a fee for reservations made through OpenTable. The majority of OpenTable's revenue comes from restaurants, which pay a one-time fee for installation and training as well as a monthly subscription fee. In addition, the company receives a fee for each diner who completes his/her reservation via OpenTable's website or mobile app, as well as the restaurant's website that uses OpenTable software. OpenTable also partners with many other sites, including

Menu Pages, Google, and Yelp, and places a reservation button next to those sites' listings.

The company serves two customer segments: people looking for a place to eat and restaurants looking for customers, and it offers online reservations directly from the restaurants' websites. By doing so, OpenTable adds value to restaurants by filling seats that would otherwise be empty, and reducing "no-shows." It also improves operational efficiency and effectively markets the restaurants to a targeted audience. Diners will be able to find and book available tables at their favorite restaurants as well as explore new restaurants in various categories. This eliminates the hassle of making reservations and provides diners with convenience. The Business Model Canvas of OpenTable is shown in Fig. 3.

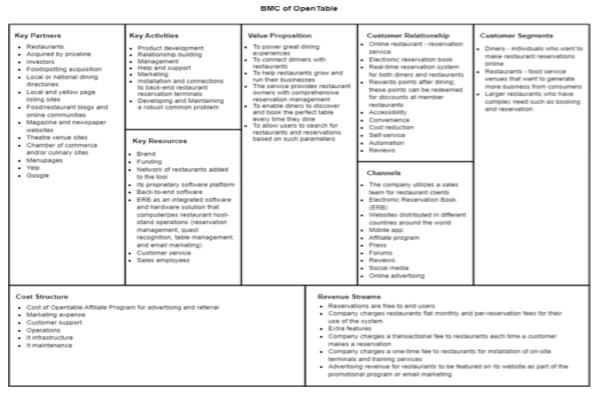


Fig.3.The Business Model Canvas of OpenTable

### 6. INITIAL BUSINESS MODEL - USING BMC & VPC FRAMEWORK

# 6.1. Initial Business Model Canvas (BMC)

Fig. 4 shows the initial Agro-BizMatch business model, using the BMC framework, that has been created based on the above literature reviews on the business model canvases of LinkedIn, Tinder and OpenTable.

#### **Key Partners Key Activities Customer Segment** Value Customer Business Promote **Proposition** Relationship Entrepreneurs Owners. **Entrepreneurs:** Delivery & Existing partnership 1. Existing Ministry of Services opportunities **Business Business Owners** Agriculture **Business** with interested Owners & Increase and Food parties. Promoter. MSMEs in productivity Industries. **Business** Platform for agricultural control. National Matchmaker. Increase profits. businesses to sector Entrepreneur Expand Start-ups discuss with each business B40 and SME other easily. connections Entrepreneurs Development Promotion of with other **Business** Council premium account sellers. mentors (NESDC). holders. Get Ministry of reasonable Help new International prices for businesses to Trade and items establish 2. Start-ups Industry (MITI). themselves. Accelerate growth of **Key Resources** Channels business. Digital Farm workers Gain platform Fishermen opportunities to SMEs in Social media contact a large agriculture business sectors Online network. Advertisements advertising Mobile app Explore new Customer service business connections. 3. B40 Entrepreneurs Promote a consistency of gaining customers. Reduce poverty rate. 4. Business mentors Increases chance to meet more entrepreneurs. Increases application for mentorship **Cost Structure** Revenue Streams IT infrastructure & maintenance. Freemium features: Salary of employees. Advertisements. Cost to execute key activities. Longer promoting time on platform. Marketing expenses. Customer support.

Fig.4.The Initial Business Model Canvas of Agro-BizMatch

The proposed Agro-BizMatch business model presents a comprehensive approach to foster collaboration and growth in the agro-based sector. Notable strengths include its all-encompassing inclusivity of diverse stakeholders, alignment

with Sustainable Development Goals, and clear value propositions tailored to different customer segments. Leveraging partnerships with governmental bodies and utilizing digital platforms enhance its potential. However, the model faces challenges in the execution complexity, marketing, balancing freemium features, resource allocation, competition differentiation, regulatory compliance, and SME engagement. Addressing these weaknesses will be crucial in realizing the platform's full potential and ensuring its sustained success in addressing the needs of the agro-based business community.

## 6.2. Initial Value Proposition Design Canvas (VPC)

The Value Proposition Design Canvas (VPC) is a framework that can assist in positioning a product or a service around what the customer values and needs. Customer segments and value propositions are separated on the VPC. The customer profile can help to clarify customer's understanding and a value map will describe how the business intends to create value for that customer. When these two meet, the business will achieve the "Fit" (Osterwalder et al., 2014). This canvas is being used to determine the worth of Agro-BizMatch to existing business owners, startups, B40 entrepreneurs, and business mentors. Figures 5-8 show the initial VPC for Agro-BizMatch.

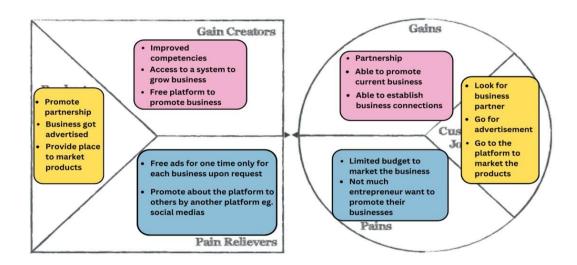


Fig.5.The Initial VPC - Existing Business Owners

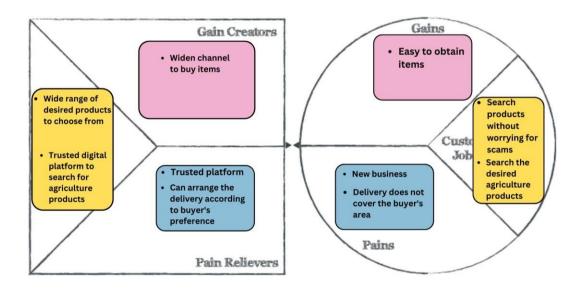


Fig.6.The Initial VPC - Start-Ups

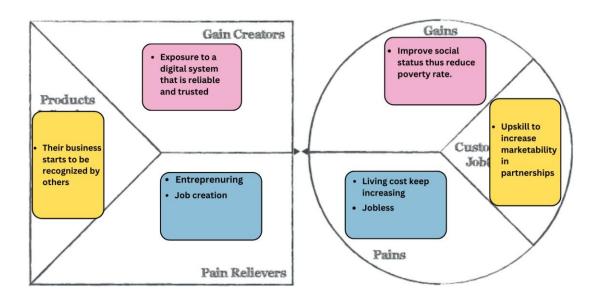


Fig.7.The Initial VPC - B40 Entrepreneurs

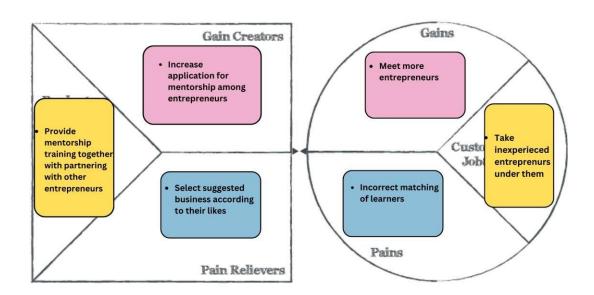


Fig.8.The Initial VPC - Business Mentors

The VPC models presented above encourage a clear value proposition that is clearly defined for each consumer category, reflecting a thorough awareness of their needs and motivations. They are also customized to certain gain points and deliver benefits to each consumer category, demonstrating a customer-centric strategy. To meet the needs of different client segments, a variety of options are available for gain creators and pain relievers. Furthermore, the value propositions for B40 entrepreneurs relate to SDG 1: No Poverty, which highlights the importance of social impact and long-term growth.

While the models predicted large benefits, some consumer categories would benefit from a more comprehensive list of potential pain points. There are also some similarities in the gain creators and pain relievers sections, which can be distinguished to offer a clearer emphasis on the benefits provided by Agro-Bizmatch. While the solutions have been outlined, the solutions provided can be distinguished from current alternatives to better attract the target groups.

### 7. CONDUCT VALIDATION OF INITIAL BM & KEY FINDINGS

#### 7.1. Introduction

For validating the initial BMC validation process, an online survey is conducted due to time and locational constraints as well as this method being convenient and efficient. This process is performed using the online survey tool called Google Form that enables us to create surveys or questionnaires regarding our proposed BMC, that are easily spread or disseminated to our target respondents. The survey answered by our respondents contains 13 questions related to our initial BMC such as proposed features, satisfaction of existing system of searching for business

opportunities, and relevancy of our BMC. We managed to obtain answers from six respondents. Some of them are relatives, acquaintances or friends that are running businesses in fields such as construction, fashion, natural health products, food and beverage, and 3D Printing. They were chosen as they are a mix of startups and existing businesses with ample experience. Therefore, they can provide suitable opinions regarding our initial BMC.

# 7.2.Key Findings

Table 1 below summarizes the key findings from the survey conducted.

Table 1: Summary of responses from the survey.

	Question	Responses	Results
1	What do you think of the current system in searching for business opportunities?	'Good' = 3 'Bad' = 3	Some of them may have had good experiences while others may not have. Regardless, by looking at the reasons for their choice, the distinction of choices is made by individual experiences.
1a	What is the reason for your answer in Question 1?	<ul> <li>'Good'</li> <li>Unable to gain confidence in engaging other business.</li> <li>To develop business, using current trends (social media) for business opportunities is more efficient and faster rather than searching aimlessly in the real world.</li> <li>We can search any business by just searching online.</li> <li>'Bad'</li> <li>Weakness in term of publicity.</li> <li>There are too many businesses and platform, so it was hard especially for startup business like me.</li> <li>I do it manually, search online</li> </ul>	This is probably due to each of the respondents' exposure or experiences when searching for partners to collaborate with in their business ventures. Some of them may have not obtained or went through the same opportunities to find partnerships.

2	Do you have any experience in doing collaboration with other businesses before?	'Yes' = 2 'No' = 4	4 respondents answered 'No' as they have not yet collaborated with other businesses while 2 of them answered 'Yes'
2a	If yes, how the collaboration is made?	2 Respondents:  'Offline' = 1 'Online' = 1	Of the 2 respondents that have partnered with other businesses, we can see that it is split evenly between online and offline. By looking at the questions, we observed that collaborations can happen in both environments.
3	Do you think there is a need to have an application that can search partnerships for businesses?	'Yes' = 6 'No' = 0	It is seen that all 6 respondents unanimously answered 'Yes'. This shows that they placed quite a high opinion on our proposed business venture and that it is very relevant as a need for businesses.
4	If there was a platform where you can easily search for partnerships with other businesses, would you use it?	'Yes' = 6 'No' = 0	This shows that if our initial BMC was further acted on and developed, it might be a useful and beneficial platform that will be used to search for partnerships with other businesses. This provides further validation for our initial BMC.
5	If you are asked to create an account and post offers of partnerships on the site, are these good features?	'Yes' = 6 'No' = 0	This question helps in ascertaining the possible features for the BizMatch partnership platform.

6	What are the other features you think can help you better in searching partnerships through an application?	KYC is done prior to registration and such action being made clear to app customers. It's easier to trust the app if the KYC done beforehand. Saved the hassle of "researching" potential partner.  Given some choices of required partnership based on categories.  Perhaps PM the potential partnership.  Having a button to notify the suggested partner directly via email/telephone number.  Advertisement.  Video promoting.	All of them gave different but valid answers such as choices of partnerships according to categories, the feature to 'Chat' or 'Private Message' the potential business partner, a section where businesses introduce themselves, and other very useful features. We observed that it is aligned with our initial business idea.
7	Do you agree having such partnership application will help you grow your business better?	'Yes' = 6 'No' = 0	It is seen that the respondents think that our proposed business venture will be able to aid them in collaboration creation and business improvement or expansion for the better.
8	Do you have any difficulties promoting or growing your current business?	'Yes' = 5 'No' = 1	Many of the respondents have difficulty when wanting to expand or grow their current business. A possible reason for this is a lack of platforms to form effective partnerships.

9	Do you think it is a good idea to implement promotion feature in the application?	'Yes' = 6 'No' = 0	Respondents all agreed that promotion is a good possible feature for the partnership platform.
9a	If yes, what do you think the form/type of promotion you prefer?	'Poster' = 6 'Short video' = 6 'Audio = 0' 'Mail' = 0	Respondents all agreed that they preferred Posters and Short Videos as the forms of promotion.
10	Do you spend any budget in promoting your business?	'Yes' = 4 'No' = 2	This shows that a majority of the respondents are willing to invest or use some of their budget in promoting their business. This suggests that they might be willing to pay for premium features of partnership promotion.

# 8. VALIDATED CONCEPTUAL BUSINESS MODEL

# 8.1. Validated Conceptual Business Model

From the survey conducted, the respondents from the customer segments are generally satisfied with the business model and no further improvements are needed. As a result, Fig. 9 depicts the validated business model canvas for the Agro-BizMatch.

Key Partners  Business Owners.  Ministry of Agriculture and Food Industries.  National Entrepreneur and SME Development Council (NESDC).  Ministry of International Trade and Industry (MITI).	Key Activities  Promote partnership opportunities with interested parties.  Platform for businesses to discuss with each other easily.  Promotion of premium account holders.  Help new businesses to establish themselves.	Value Proposition Entrepreneurs:  1. Existing Business Owners  • Increase productivity control. • Increase profits. • Expand business connections with other sellers. • Get reasonable prices for items.	Customer Relationship  Delivery & Services Business Promoter . Business Matchmaker .	Customer Segment  Entrepreneurs  Existing Business Owners & MSMEs  Start-ups.  B40 Entrepreneurs  Business mentors
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#### 2. Start-ups **Key Resources** Channels Accelerate growth of Farm workers business. Agro Gain opportunities Fishermen BizMatch to contact a large SMEs in Digital business network. agriculture platform Explore new business sectors & apps connections. Advertisements Social media Mobile app Online **B40** 3. advertising Customer service Entrepreneurs Promote a consistency of gaining customers. Reduce poverty rate. Rusiness mentors Increases chance to meet more entrepreneurs. Increases application for mentorship **Cost Structure Revenue Streams** Freemium features: IT infrastructure & maintenance. Salary of employees. Fees? Cost to execute key activities. Advertisements. Marketing expenses. Longer promoting time on platform. Customer support.

Fig.9.The Validated Business Model Canvas of Agro-BizMatch

The nine blocks of the BMC for Agro-BizMatch are described as follows:

# 8.1.1. Customer Segments

The customer segment for this platform would be for entrepreneurs, such as the existing MSME business owners that would like to expand their business and look for more resources and partnerships; for startup businesses that would like to look for business opportunities with experienced businesses; for B40 entrepreneurs who are welcome to use this platform to help them promote their business without worrying about the finances; and lastly, for business mentors to use this platform to gain connection with new and existing business owners and help them to excel in the business world.

### 8.1.2. Value Proposition

Value proposition is the service or product that Agro-BizMatch will deliver to the customers to help with their extreme pain, essential gain and important job-to-do. For the existing business owners, this platform will help them in increasing productivity, expanding market reach, and profit; and at the same time expanding their business connection with other sellers. It also helps them in finding goods at a reasonable price. As for the startup businesses, this platform would help them in the growth of their businesses and provide opportunities to build connections and networks with other businesses. It also helps the B40 entrepreneurs in reducing poverty rate and helps in promoting their product to consistently gain their customers. Business mentors would use this platform and increase the chance of meeting more MSMEs and B40 entrepreneurs, at the same time gaining application for mentorship.

#### 8.1.3. Channels

The channel to be used to promote Agro-BizMatch is through digital platform and apps to let people know about what it has to offer, that is a collaborative platform for agricultural businesses. Other than that, social media is a great medium to encourage entrepreneurs in using the Agro-BizMatch Partnership Platform. Lastly, online advertising would be a great marketing strategy to promote this collaboration platform.

#### 8.1.4. Customer Relationships

Customer relationships include delivery and logistics services that help in delivering goods, if any users on the platform decided to buy directly from the business owner there. Next is the relationship with business promoters, in case some startup businesses have trouble in promoting their business and would prefer to use business promoters other than what the platform offers. The same goes to the relationships with business matchmakers that can help in giving consultation about business collaboration and partnership compatibility.

### 8.1.5. Key Resources

Key resources are the most important assets required in delivering the value proposition. In this case it would be the farmworker and fishermen. Since they are working in the agricultural sector, this platform would be useful for them in expanding their business. Next is the SMEs in the agricultural sector, which are also suitable to use this platform. Advertisements and mobile applications help to market the businesses, and customer services help in managing users that are using Agro-BizMatch.

#### 8.1.6. Key Activities

The key activity of Agro-BizMatch is to promote partnership opportunities between interested businesses. It is also a place for entrepreneurs to discuss with each other regarding their business, and issues regarding the agricultural sector.

The other key activity of this platform is to offer promotion for premium account holders, and at the same time help new businesses establish themselves.

### 8.1.7. Key Partners

In making sure that Agro-BizMatch operates well, there are a few partners involved in it. Business owners become our main partners as they are to promote their businesses respectively. On the other side, there are involvement from ministries such as the Ministry of Agriculture and Food Industries, Entrepreneur and SME Development Council (NESDC), and the Ministry of International Trade and Industry (MITI). These bodies will facilitate increased support to more growth of the businesses as well as be responsible for any international trade and industry with other countries.

#### 8.1.8. Cost Structure

Cost structure describes all costs incurred to operate the Agro-BizMatch business model. This includes the IT infrastructure and maintenance costs, along with the salary of employees, as well as the costs for executing the key activities and marketing expenses, and providing customer support and services in making sure that the Agro-BizMatch platform can be used to the fullest.

#### 8.1.9. Revenue Stream

The Agro-BizMatch platform is expected to generate income via premium features provided such as business advertisements and promotions. The longer and the more often their business is featured, the easier for them to get partners. The fees will also be charged for every successful partnership and as for advertisements, the customer segments will need to pay commission for every 1000 views. However, the charges will be excused for the B40 entrepreneurs as an effort to lessen their burden and to ensure they get 100% profits for their business.

#### 8.2. Environmental Map

#### 8.2.1. Revenue Stream

Market forces tell the competitive strategies especially on small businesses performance (Echegoyen et al., 2019). Based on our business model, it shows that our customers are startups and MSMEs, and businesses that are associated with the agricultural sector. These customer segments are facing issues in marketing their products and renting physical stores with the limited budgets they are having. In addition, the B40 entrepreneurs are facing a hard time keeping up with the current economic situation that is pricey. Other than that, business mentors can lessen their trouble in looking for learners instead, using the Agro-BizMatch platform to look for mentees that are seeking knowledge about business.

# 8.2.2. Key Trends

The key trends help to shape Agro-BizMatch by providing a platform for businesses to build partnership with each other, especially the agricultural businesses, startups, and small and medium businesses. Digital platforms are the best way to promote businesses for the reason that it is cost effective and would

lessen the burden of the B40 entrepreneurs (Parker et al., 2017). Agro-BizMatch would help them find their own compatible partner to expand their business and find reliable resources.

# 8.2.3. Industry Forces

Industry forces are the rivals or the existing platforms that offer the same services which is the collaboration platform. There are a few existing apps that offer finding suitable business for partnership such as the AllyMatch and Tüyap Matchmaking System. However, it focuses on big companies that specialize in Research and Development (R&D) and use high technology. This can be difficult especially for people that are not used to technology. Hence, Agro-BizMatch provides a collaboration platform specially for the startups and MSMEs with a simple interface to make sure that it is user-friendly for any group of people.

#### 8.2.4. Macroeconomic Forces

The Covid-19 pandemic has greatly impacted the economic state of Malaysia. It was addressed by the Government about the issue of vulnerability of the B40 group. Simultaneously, all kinds of business were put on hold during the pandemic, resulting in people losing their jobs. Thus, to help recover this issue, Agro-BizMatch is formed to help entrepreneurs get back on track and build their businesses and expand it by forming partnerships with other businesses. With the features offered by this platform, it is hoped that the poverty rate can be reduced in Malaysia. Additionally, businesses can build connections and expand their businesses.

# 8.3. Strategy Canvas

Strategy Canvas is a tool that provides a way of visualizing how competitors draw in customers, thus comparing the businesses and strategies between businesses in working forward to blue ocean strategy (Chan & Mauborgne, 2005). By using this tool for the Agro-BizMatch platform, it helps to compare us with other sectors in the market. We are focusing on agriculture which makes us go deeper and dig into how many business owners can make partnerships with each other, nationally or internationally. From being competitors between businesses to partnering together for better opportunities and expertise and knowledge, all of them can work together for a better food security where the Malaysian people have sufficient food that can cater to their needs and preferences, thus decreasing the rate of imports from other countries. This is to ensure all people always have both physical and economic access to the basic food that they need (FAO, 1983).

By using this strategy canvas, we would like to establish a website application as a platform that would promote partnership opportunities among entrepreneurs to match with their interest. We wish to build a platform where the existing business owners can expand their business connections with others as well as getting a reasonable price for items that they want to partner with. We act as "middleman" for them to choose which business they like and decline for what they do not like. By doing this, they can save their time and proceed with the next steps. Besides, our website welcomes the startup entrepreneurs to explore more about other

businesses along with gaining new opportunities to contact a large business network. This will help to accelerate their business growth and to get networking with others. Not just that, we also put our priority on the B40 entrepreneurs for them to promote their own business in the way of gaining customers. Also, the poverty rate can be reduced in the hope that their social classes will be upgraded and be able to have stable jobs. Lastly, this website will be an advantage for business mentors to meet more entrepreneurs to guide them for a better way in doing business. Those entrepreneurs will be doing business and partnering with other entrepreneurs under the teachings of the mentors. This can train their skills in a specific direction and provide guidance on how to run and grow the business as well as developing new skills needed to be successful.

Entrepreneurs are going digital, and they would use the Internet as the main method to promote their business (Bizhanova et al., 2019). Thus, we will promote the website via social media such as Facebook, Instagram and Tiktok to post photos and give updates on our platform from time to time, so that people from anywhere can search and recognize us and will start to use our website more often.

# 8.4.Low Fidelity Agro-BizMatch's Prototype

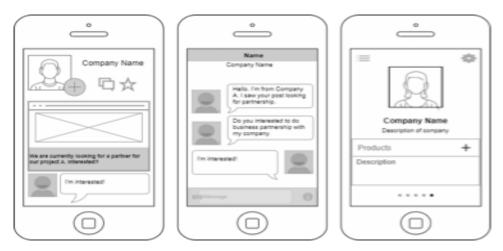


Fig. 10. Low Fidelity Agro-BizMatch prototype

Fig. 10 shows the low-fidelity prototype of Agro-BizMatch. The first image shows the interface of the post page, where clients can post relevant offers and information about their businesses. Viewers can respond in the comment box below the post, or privately message the post's owner. The application supports the feature to upload images, thus clients will be able to post the images related to their businesses such as their products, offers, promotions and so on. By doing so, other clients will be able to see what is being posted, thus increasing the public's awareness of their businesses.

The second image shows the chat page in the application. The clients will be able to interact privately with another clients to discuss business matters. The name

and company from which they are calling will be displayed on the chat page so that the other clients know with whom they are speaking.

The last image shows the profile page of the clients. They will be able to upload a profile picture and enter their company name, as well as a brief description of their business. The clients can also add their products and descriptions so that when people visit their profile page, they can see what the clients are selling, which will indirectly market the products and services.

# 9. CONCLUSION AND FUTURE WORK

In conclusion, this paper presents a notable contribution through the introduction of the conceptual Agro-BizMatch platform business model, aimed at addressing critical challenges faced by diverse customer segments in the agro-based sector. This conceptual business model anticipates offering substantial benefits to its user base, particularly by fostering business growth and ensuring consistent customer acquisition for entities like the B40 entrepreneurs. The Agro-BizMatch platform serves as a catalyst, expanding business connections for the B40 entrepreneurs, thus indirectly combating poverty-related struggles arising from the limited customer outreach opportunities due to factors such as limited market exposure. Moreover, by catering to both new and existing entrepreneurs, the platform supports business mentors in connecting with potential mentees, thus enabling skill development and business management knowledge transfer. A pivotal advantage of this platform is its ability to facilitate meaningful local entrepreneurial collaborations, yielding mutual success.

By harnessing the potential of Business Modelling tools and incorporating feedback from potential customer segments, a robust business concept has been formulated for this Partnership-Enabling Platform. This endeavor not only fulfils its objectives but also propels the creation of practical and viable solutions to address socio-economic issues prevalent in our country, including poverty reduction, food security, and the promotion of entrepreneurship and financial careers. This strategic alignment is congruent with the key aspects of Malaysia's national entrepreneurial and financial policies, indicating the platform's resonance with wider governmental objectives. The conceptual Agro-BizMatch business model, if realized, holds the promise of benefiting a wide range of individuals encompassed within its diverse customer segments.

The next step in transforming this conceptual business model into a real business solution is to create a business plan using the V2MOM (Vision, Values, Methods, Obstacles, and Measures) model. A detailed business plan is required because it will serve as our guide as we start and manage the business. It is also a method of thinking through and detailing all of the key elements of how our business will operate in order to remain profitable and long-term viable. Agro-BizMatch could also be a reliable source for entrepreneurs to fine-tune the performance of their new or existing businesses, as well as the key power for the B40 entrepreneurs to do business until they can independently improvise their lives and escape poverty.

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