E-business Startup Model using Canvas Business Model (case study: SiJasPro)

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Abstract

With the rapid development of information technology today, more and more businesses are using the internet as a medium to disseminate information and choose the right business model in order to survive and develop. This study aims to determine the business model of a startup in the Project Services Information System (sijaspro) by conducting analysis and evaluation to determine the strengths, weaknesses, opportunities, and threats so that they can design a business model. The research method used is a qualitative method. This study uses the theory of the business model canvas and SWOT analysis. The results show that the company's business model requires several additional factors in each element of the e-business model in order to grow and develop better by providing building project features and services and applications to users.

Keywords: e-business, canvas business model, building project services

1. Introduction

Business or commerce is the activity of buying and selling goods or services with the aim of making a profit [1-3]. Etymologically, business means a situation where a person or group of people is busy doing work that generates profits. The word “business” itself has three uses, depending on the scope - the singular use of the word business can refer to a business entity, namely a legal, technical, and economic entity that aims to seek profit or profit [1,4,5]. Broader usage may refer to a specific market sector, for example “television business.” The broadest use refers to all activities carried out by the community providing goods and services.

Business is a commercial business in the world of commerce, business, or trading business. Broadly speaking, the word business is often referred to as the totality of business activities carried out by a person or body in an orderly and continuous manner, which is in the form of the activity of procuring several goods or services or facilities for being traded, exchanged, or used with the aim of making a profit [1-5]. Business is one of the activities that is very much in demand by residents. Not only getting profit, business also aims to fulfill what is needed by citizens, increase economic progress and development, and be able to create jobs. A person's desire to build a business is very much determined by the performance of the business. This matter means that entrepreneurial mentality that is tough for the younger generation is a challenge in a digital economy based on innovation and creativity [4].

Since the Covid-19 pandemic, the development of e-commerce in Indonesia has increased [6,7]. This matter is caused by customer routines whose shopping method has shifted from offline to online. So, it is not surprising that e-commerce is increasingly favored by customers. The rapid growth of e-commerce cannot be separated from how massive digital infrastructure development is. E-commerce is also the most effective alternative for online shopping [7,8]
The E-commerce Map of Indonesia ranks the big e-commerce players based on the average website visitors in each quarter, app ranking, social media followers, and number of employees \([7,9]\). The image below explains the search for e-commerce competition in Indonesia filtered by Business Model with general spending in Indonesia in the 4th quarter (February 9, 2021.)\([9]\).

![E-commerce Map of Indonesia](image)

**Figure 1. E-commerce Map of Indonesia [9]**

Seeing that e-commerce in Indonesia deals with retail, travel agents, the author will try to design a service site that will help part-time workers to sell services to consumers in need. With the method of data analysis, business studies and empirical data to produce the right e-business model design for part-time job services in the form of a Sistem Informasi Jasa Proyek, abbreviated as SijasPro. which aims to facilitate consumers in finding building materials and builders, buying material needs and looking for builders according to the available budget \([2,4-6]\).

2. **Research Methodology**

This study uses a descriptive qualitative type to describe a startup business model in the Project Service Information System (sijaspro). Qualitative research is research that intends to understand the phenomena experienced by research subjects \([34]\). The method used in this research is the case study method. According to when we do detailed research on a person (individual) or some social unit over a period of time, we are doing what is called a case study \([35]\). The subjects of this research are all parties related to the company. The research subjects here consist of suppliers, building service providers, customers who place orders for materials and services. The object of this research is the current project service start-up business model (SijasPro) which will be evaluated and a new business model design is made using a nine-element business model canvas approach in the form of customer segments, value propositions, channels, customer relationships, revenue streams, key resources, key activities, key partnerships, and cost structure. This study uses qualitative data. Qualitative data are documents, field notes, respondent’s words and actions and supporting documents \([36]\). These data are used in order to help identify and analyze the business model that is being applied by the Sijaspro startup company so that they can design a new business model for the company. The data source used in this study is the primary data source. Primary data is data obtained directly from research subjects, in this case the researcher obtains data or information directly using
predetermined instruments [37]. Primary data used in this study were obtained from interviews and identification of nine elements of the company's business model canvas. This research was conducted using semi-structured interview techniques. This interview is a combination of structured and unstructured interviews. A structured interview is an interview in which the interviewer sets his own problems and questions to be asked and has been rigorously structured [34]. Unstructured interviews are interviews that are not prepared in advance and are tailored to the circumstances and unique characteristics of the respondent. The technique of selecting informants is carried out using purposive sampling where informants are selected with certain considerations, for example the person is considered to know best about what we expect or maybe he is the ruler so that it will make it easier for researchers to explore the object or social situation under study [36]. The data analysis technique used is based on [34] by conducting data analysis, data editing, categorization, synthesis, and data interpretation. The data validity test used was source triangulation. Source triangulation serves to test the credibility of the data which is done by checking the data that has been obtained through several sources, then the data obtained is described, categorized and analyzed to produce a business model.

**Figure 2. Qualitative Research Methods**

The Canvas Business Model is a business model concept developed by Alexander Osterwalder and Yves Pigneurini, successfully transforming the concept of a complex business model into a simple one [21-23]. With the canvas approach, the business model is displayed on a single sheet of canvas, containing a map of nine elements [20]. Because of its simplicity, the canvas method can encourage as many employees as possible to be involved in the development of the organization's business model.
3. Result and Discussion

3.1. Canvas Business Model for SiJasPro

In designing a business model for sistem informasi jasa proyek in short a si jaspro startup for the following reasons:

a) Visual thinking: the best way to use model canvas is to print a large poster sized version and stick it to the wall. After that, the founder then used sticky notes like post-it to fill in 9 sections. Sticky notes allow group thinking because everyone on the team can actively participate.

b) Iteration quickly: “iteration” is the process in which the founder “leaves his office or lab” and tries to validate his idea, then returns to the office to improve his business model and products based on market feedback. Given the concise and holistic nature of the canvas business model, founders can quickly do this iteration.

c) Quickly see the link between the 9 components of a business: the business model canvas allows the entrepreneur to visually describe the link between each of the components of the business. Often founders draw lines and illustrations on posters to represent the pieces of the puzzle and how they work together. In this way, the team can find relationships from unique market opportunities and / or value propositions. Furthermore, the team can then document the new ideas as new hypotheses to test the canvas model as a new iteration.

d) Forcing the team to briefly convey its thoughts: because information is recorded briefly in post-it notes, the team is forced to explain precisely and succinctly what they want to test or follow up on in the next iteration.

e) The visual form of the canvas business model makes it easy for startups to share it with partners, colleagues: because the canvas business model is presented in the form of large and visual posters, it's easy to share via photos or take posters from the wall to meet other interested parties.

The following is a canvas business model that will be submitted for the sijaspro part-time job service start-up.

**Table 1. Business model of part-time job service canvas business**

| Element       | Description                                                                 |
|---------------|-----------------------------------------------------------------------------|
| Value Proposition | • Online-based, so that the people/entities can search freelancer in accordance with the needs and close to its position. |
### Elemen

- Jobs are assigned online or offline.
- The freelancers can find jobs according to their skills, and close to the location.
- Payment with a joint account so that it can ensure the safety of both parties.

### Channel

- The application can be accessed via desktop and mobile platform.
- The mobile app supports a lot of popular platforms to gain users.

### Customer Relationship

- Freelance workers will get a verification and recommendation in order to get the best job.
- The presence of online and offline training to the workers off with the membership to improve the quality of service.
- Build the community of freelance workers.

### Customer Segment

- People/Businesses that need workers off.
- People skills and takes the work off.

### Key Resource

- Admin application
- Sales marketing
- Creative web-business developer
- Business Analyst
- Trainer Expertise and Management

### Key Partner

- Community, cooperative, association of experts, associations hobby and others.
- Companies, SMES, individuals and households.

### Key Activities

- Looking for freelance and project.
- The search parties that require the services of a freelancer.
- Profile & selection partner/company/projects and freelance workers.
- Looking for feedback from the user/market
- Search Engine Optimization
- Research and Development Business
- Administration

### Cost Structure

- Application development
- The maintenance and management of the application.
- Marketing
- Research and Analysis business

### Revenue Stream

- Investor
- Commission
- Registration
- Premium advertising

### 3.2. SWOT Analysis

The method of SWOT (Strength, Weaknesses, Opportunities and Threats) is a technique of strategic planning is often used[25]. S and W to identify the internal strengths and weaknesses, with regard to the functions of management (planning, organizing, directing, motivating and controlling), business functions (production, marketing, human resources, finance). O and T: analysis of external opportunities and threats (in terms of social, technological, economic, political, legal, environmental,
demographics and competitors). S-O strategies, strategies pursue opportunities that fit with the strength of the company. W-O strategies is a strategy to overcome weaknesses to pursue opportunities. S-T strategies, a strategy to identify the problem so that the company can use its power to reduce the threat from the outside. W-T strategies is a strategy to establish a defensive plan to prevent the company from outside threats. SWOT analysis is a good way to better understand a business. The SWOT analysis allows us to analyze different regions of looking at the entities that are associated with the external and internal factors[25]. So that gives us an understanding that is complete for parameters that affect the decision-making process.

Here are the results of SWOT analysis for business models will be developed to service the services of a part-time job there in this research.

### Table 2. SWOT Analysis

| Strengths (S)                          | Weaknesses (W)                                          | Opportunities (O)                                      | Threats (T)                |
|----------------------------------------|---------------------------------------------------------|------------------------------------------------------|---------------------------|
| • Indonesian service applications are few | • Differences in skills and work experience             | • own business                                        | • Loss of partners         |
| • Many internet users                  | • Need funds for investment                             | • household users                                     | • Price competition        |
| • Opening jobs for experts             | • lack of trust from freelancers                        | • People need homes                                   | • price inflation          |
| • An affordable price                  | • Business reputation is easily affected                | • Skills                                              | • Business competition     |
| • skilled employees                    |                                                         | • Companies looking for workers                       | • rising raw material prices|

**3.3 Technology**

In building a start-up company based on information technology, it is necessary to use technology that can grow with the progress of the company. According to this research, where the writer wants to make a part-time job application, it is necessary to analyze what technology is most likely to be used so that our business can run well.

Based on the results of the survey in 2021, it shows that applications from the retail business take up 27% of the total time consumers spend online, this means that mobile applications are very important to get consumers when they are actively online. At the same time, 67% of consumers say that they are more likely to buy goods from a mobile-friendly website than those who come to a website that is not mobile-friendly. And there are three main reasons why a mobile-friendly website is more profitable for businesses because it is more friendly to the use of Search Engine Optimization (SEO), namely

a) Recommended by Google. It is because of the site with the responsive design has one URL and the same HTML, although different device access, which makes it easier and more efficient for Google to crawl, index, and organize content. Different from mobile site is a separate, has the URL and different HTML than its desktop, makes Google takes more time to crawl and index from the same site. Additionally, Google prefers responsive web design because it is easier for users to share and interact with the content than on the mobile site separately.

b) One site many platforms, one of the most interesting aspects of responsive web design is that a responsive website can provide a great user experience across many devices and screen sizes. This is an important characteristic, because it is not possible to anticipate all the devices and screen sizes used to access the site. A site that works well regardless of these variables will provide a better user experience and more consistent than the mobile site separately designed for a display device and a specific size.

c) Easy management, Has a site that separate between the desktop version and the mobile version requires management SEO separate. Managing one site and one SEO
is much easier than managing two sites and two SEO. This is a key advantage a responsive website has over a mobile site that is separate. And can have a SEO strategy that is specific to mobile, such as optimizing for keywords that are more likely to be searched when someone is on their smartphone.

However, the development of the app that is mobile friendly also have flaws, so we need to develop mobile application for the users that are more specific. The mobile app is designed for an experience that is unique, exclusive to the operating system is concerned, which means this is not a one size that fits well on all mobile devices. Although the website responsive can optimize the user experience, but unfortunately responsive design is not integrated with the features of the smartphone such as the camera or GPS, which is the excellence of the mobile application. A mobile application can provide users with unique functionality and speed that can not be matched responsive websites, but it can be enjoyed in any operating system. In addition to could use some of the features that exist in mobile devices to provide an interesting experience, the mobile app can also provide more data from users, that's why a mobile application can give you a more personalized experience. Personalization through data can dmanfaatkan by notification in the app, the recommendations of the work or job search, and suggested content to specific users.

4. Conclusion

From this study it can be prepared a business model for startup companies to develop the services of a part-time job. the business model can be compiled using the business model canvas. to the side of marketing can be analyzed through swot. While the technology developed in the development of such services can use the application technology of the design of responsive or mobile-friendly so you can reach more users and friendly to seo. While mobile app development sijaspro can be a reference in its development.

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