



# Product Testing Model on Prospective Users of Bliin Application

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**Abstract.** Many Businesses are declining because of COVID-19. One of the impacts of the PSBB is the closure of traditional markets in several areas. Seeing the problems that occur, people are afraid to make direct contact. PT. Digital Inovasi Bersama has issued a product in the form of an application called BLiin. Even though it has been running for one year, the BLiin application has not tested the products (applications) on consumers. With the problems that occur, the researchers are interested in further research to know how to implement the application in the field and create a product testing model. The research used a descriptive qualitative method with several informants as many as 30 people. The results of the study indicate that in the field this application is not yet widely known, 60% of consumers prefer to shop for their needs like vegetables, fruit, etc. at the store. 90% of the respondents think they will only use the BLiin application when they need to, so consumers are at the stage of being interested and not yet wanting to use the application. When they are going to launch an application, they should do product testing on their market research, not just make comparisons with other applications. Therefore, for the launch of other applications or products, the BLiin team can use the test model that the author has compiled to find out how the interest and usability of the application will be in the future, not only from the phenomena that occur.

**Keywords:** Innovation · Application · Product Testing

## 1 Introduction

This pandemic has indeed put many companies out of business, but some companies are growing rapidly due to this pandemic as mentioned by the news portal Liputan6 on their website. According to Hurley and Hult [1], convey innovation as a process of company adaptation in creating ideas about new products that can be obtained from consumers, in people's lives, innovation is needed to solve problems. There are 4 (four) tests in testing new products, namely: 1. Technical testing, 2. Preference and satisfaction testing, 3. Simulated market testing, 4. Market testing [2]. Seeing the problems that occur, where people need food but are afraid of direct contact.

First research is by Diah Pradiatiningtyas conducted a study in 2020 titled "Consumer Preferences and Purchase Decisions on Online Shopping Applications during the

Covid-19 Pandemic (Case Study: Go Mart and Online Vegetable Applications)". The study aimed to investigate people's preferences and purchasing decisions when using logistics and vegetable shopping applications such as Go Mart and Online Vegetable Applications. The research used a descriptive method with a qualitative approach, utilizing data collection methods such as observation and surveying 100 randomly selected respondents aged above 20 years. The results indicated that people have a preference for using Go Mart and Online Vegetable Applications, but due to their long-standing habit of shopping for logistics online, they are still in the stage of being interested in using these applications, and many have not yet decided to use them [3].

Second research is by Redi Ardito Jupetra conducted a study in 2019 titled "Development of a Ordering Application for Mobile Vegetable Vendors with Daily Dish Recommendation Features Utilizing FCM and LBS based on Android". The research focused on the development of an application that aims to facilitate customers with their regular vegetable vendors. Although the research did not primarily focus on business, it involved testing the product on 20 respondents to gather their feedback on the application. The objective of the study was to develop an ordering application for mobile vegetable vendors with daily dish recommendation features utilizing Firebase Cloud Messaging and Location Based Service based on Android. The beta testing results showed that all the response percentages received from the respondents appreciated the application with more than 85%. Therefore, the development of the ordering application for mobile vegetable vendors with daily dish recommendation features utilizing Firebase Cloud Messaging and Location Based Service based on Android aligned with the researcher's objective [4].

PT Digital Inovasi Bersama issued a product Although it has been running for 1 year, the BLiin application has not conducted product/application testing for its consumers, they have only conducted technical testing on the application. This is very unfortunate even though by doing product testing the company can save money/cash/capital [5]. In the form of an application called BLiin, where this application helps people shop online for market products. Before this research, the author conducted pre-research activities for three months to observe the running of the application and company activities related to the BLiin application. During the pre-research period, the author found phenomena that occurred, including:

- The concept of the BLiin application is relatively new, there is no comparable application in Bandung City that has a concept of collaborating with traditional markets. When the author conducted pre-research, the author also found that the appearance of this application kept changing, there was no consistency in the concept and the business range was too wide.
- The benefits of this application have not been tested, because not many people use this application, as evidenced when the author conducted pre-research, not so many people used this application.
- Compared to other applications other than differences in the concept of the application there is no difference that is so prominent from this application, as evidenced when making observations, the way of operation of this application is still adapting from other applications.

- According to the results of pre-research observations after users download and use the application, users rarely provide suggestions and input, or better known as feedback about the application so the company never really knows how the sustainability of this application is in the future.

With the phenomena and problems that occur, the authors are interested in researching further.

## **2 Literature Review**

### **2.1 New Product Development**

The new product development process is a complex series of activities, and many problems arise and become obstacles for the product development team. Before product development is successful, product development companies face various issues that must be resolved [6]. From this statement, developing a new product is not easy, it must go through various stages, and in these stages, it can cause a variety of problems that occur.

### **2.2 New Product Testing**

New product testing has two main objectives, namely, to determine the durability of the product to be sold to the market and to find out what the market wants. In general, there are 4 (four) new product tests, namely: Technical testing, preference and satisfaction testing, simulated market testing, and market testing [2]. Based on Suryanto's opinion, it can be concluded that product testing is very important for new products, apart from being able to see the big picture of product marketing, it can also find out whether the products offered are useful and needed by the community or not, besides that the company can also find out the shortcomings in its products so that it can make efforts to improve the products to be marketed.

## **3 Research Methods**

This study uses descriptive qualitative research methods, namely data collected in the form of words, pictures, or statements from research subjects, not in the form of numbers because the results of this study are in the form of descriptive analysis of observed behavior both written and verbal.

### **3.1 Population**

In this research, the population is the CEO and CTO of the BLiin application and people who like to go to the market and working mothers who do not have time to shop at the market in Bandung City.

**Table 1.** Criteria for this purposive sampling.

No	Informant	Criteria	Reason for selection
1	BLiin Team	- CEO - CMO - CTO	This position is directly related to the planning and operation of the BLiin application.
2	Market Customers	Smartphone Users Tech-savvy Accustomed to using online applications Like to shop at the market	The informant's dimension is in the BLiin team's marketing strategy, namely STP
3	Working Mom	Smartphone Users Tech-savvy Accustomed to using online applications Working moms who rarely go to the market	The informant's dimension is in the BLiin team's marketing strategy, namely STP

**3.2 Informants**

Selection of informants with Purposive Sampling because Purposive Sampling technique because not all samples have criteria that match the phenomenon under study. Therefore, the authors chose the Purposive Sampling technique which determines certain considerations or criteria that must be met by the samples used in this study. The criteria for this purposive sampling are (Table 1):

**3.3 Data Collection Methods and Data Collection Instruments**

In this study the authors used primary data, namely data obtained and collected directly from research informants by researchers/writers, then the data was processed in such a way as to see the results obtained. The data collection techniques are interviews, observation, and documentation.

**3.4 Interview**

The interview technique in this research is a structured interview, where the interview is carried out by asking several questions systematically, the types of questions that will help the author ask interview questions to the interviewees later include:

- User BLiin
  - Background (demographics)
  - Daily behavior
  - Consumption behavior
  - Product concept

- Product benefits
- Product differentiation
- Product forecasting
- BLiin Team
  - Application concept
  - Benefits of the app
  - Purpose of making the application
  - Expectations on consumers

## 4 Results

In obtaining data, the author obtained it with interview techniques and in-depth observation of informants as the main method, and documentation as a supporting method.

The interview method aims to obtain data and information, moreover, the informant as the main source in this research is the primary data. In the interview, the author explores information about the daily behavior and responses of informants regarding this BLiin application. The second method that the author uses is observation, where observation aims to strengthen the answers in the interview, whether it is true what the informant states by looking at the actions that the informant shows.

In obtaining data, the author tests the validity of the data using triangulation. In this study, the source triangulation carried out by the author is to compare the existing theory with the data obtained. Triangulation Techniques Test the credibility of data by using different techniques to check the same data source. For example, data obtained through user interviews is then checked through observations and interviews from the company. In this study, the author obtained the main data by interview, so to ensure that the source statement was true, an observation was made at the source itself, then strengthened by documentation. In addition, the author also made observations on the BLiin team. Time Triangulation is Time also affects the credibility of data. Data collected by interviews were conducted at a time before use or upon in each stage, the author gives 1 week for respondents to try the application, with controlling once a week, namely after 3 days from stage 1, and stage 2 after 6–7 days from stage 1 or even directly after using the application. For BLiin's observation, it was obtained when the author conducted an internship/Field Work Practice at BLiin Application.

### 4.1 Dimensions of Informants' Shopping Behavior

Quite a several working mothers responded that they do not go to the market because they are so busy that they do not like to go to the market and do not have a certain frequency for shopping at the market. Meanwhile, there are around 7 people who like to go to the market every day, and 4 other people go to the market because of the need to trade, namely, they buy raw materials for their sales. According to the results of the interviews, each informant also goes to a market that is close to his house or goes to a market where the sellers on average provide low prices (Fig. 1).



Fig. 1. Dimensions of informants' shopping behavior.

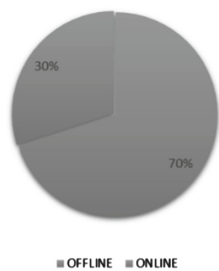


Fig. 2. The dimensions of informants' consumption behavior.

4.2 The Dimensions of Informants' Consumption Behavior

More than 50% of the answers were answered offline, especially from people who usually go to the market the majority answered offline, it can be seen that in terms of shopping for daily necessities working mothers can be a potential target for application use (Fig. 2).

4.3 Product Concept Dimensions

Of the 30 respondents, 100% gave answers that the BLiin application was understandable, and this application was quite simple in appearance, so the BLiin team had succeeded in building the concept of this application to be easily understood even by people

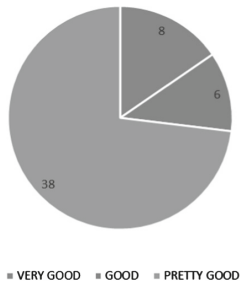


Fig. 3. Product concept dimensions.



**Fig. 4.** Product benefits dimension.

aged 62 years, all responses stated positive and good, only Mr. Suhadi felt that this application was felt to be quite creative because it collaborated with market traders (Fig. 3).

However, the responses regarding the ease of use of the application variable answers are less than the difficulties in the application, many think that the use of this application is quite complicated, top-up balances are still confusing, and other technical errors, of course how to operate this application needs to be improved, there are 5 main things that must be improved in this application, namely application operation, tracking goods, commodity updates, top-up balances, and application settings because many have revealed that this application has too many things to click when placing an order, it is not automatic when showing the recipient's address in the application feels that this application is less efficient when operating it, such as ordering which is less practical because you have to click on many available options, top-up balances where users need to send proof of transfer via admin in the chat column and with a long process, items on the market menu that are still considered incomplete, and Tracking orders that are not clear in delivery.

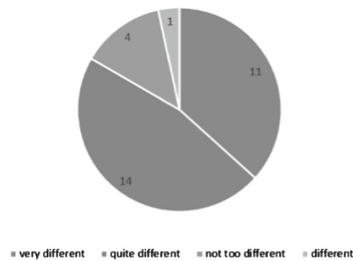
#### 4.4 Product Benefits Dimension

Because 60% of consumers prefer to shop for vegetables offline, which is based on not finding an application like BLiin that can specifically buy vegetables and based on the informant's desire to empower his neighbors as expressed by several people during the interview (Fig. 4).

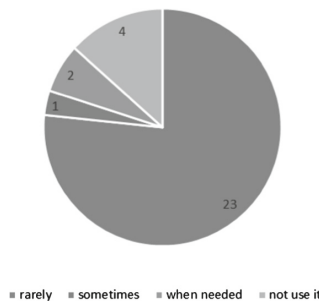
#### 4.5 Dimensions of Product Differentiation

When compared to other applications 100% of the answers they prefer to use other applications, the answers given are very diverse, but the main factor is the way of operating the application that is less usable (Fig. 5).

The applications they use are in the form of e-commerce that only help fulfill their desires in buying goods, for example Shopee and Lazada, besides that almost all respondents use applications similar to grab and gojek but are used for transportation and ordering food so, for the use of the mart feature itself they don't really use it. All respondents think that this application is very different from the applications they usually use, especially in the concept of applications that work with traditional markets. However, in its operation, they preferred the application they used because it had few problems, while the BLiin application itself was considered less efficient in its use.



**Fig. 5.** Dimensions of product differentiation.



**Fig. 6.** Dimension of continuous use.

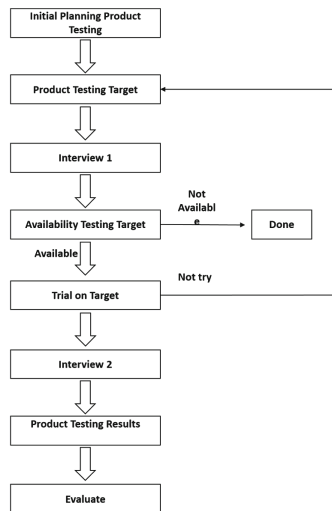
**4.6 Dimension of Continuous Use**

90% of respondents think they will only use the BLiin app occasionally and sometimes, so that means they are still at the interesting stage not yet at the stage of wanting to use the app. So it can be seen that this application has great potential, but for now, there are not many who use it. This can be caused by the BLiin Team’s marketing method which is wrong and too monotonous. Only relying on 1 type of marketing makes people out there not so interested in the application (Fig. 6).

**5 Conclusion**

In product testing the author uses consumer preference and satisfaction techniques, where consumers are given time first to try the BLiin application and then provide feedback after using the application. Based on the author’s observations in the field, this application is not widely known, not even just the application, people do not know the application that can be used to shop in traditional markets. Of the 30 respondents, 100% answered that the BLiin application is understandable, so the BLiin team has succeeded in building the concept of this application to be easily understood even by people aged 62 years, but of course how to operate this application needs to be improved because many feel this application is less efficient when operating it. 90% of the respondents thought they would only use the BLiin app occasionally and sometimes, so that means they are still at the interested stage but not at the stage of wanting to use the app.





**Fig. 7.** Formulation of product testing model.

## 5.1 Formulation of Product Testing Model

See Fig. 7.

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