# EASE FOR BUYING MEDICINE THROUGH THE DELIVERY SERVICE AT MAZAYA PHARMACY

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## **ABSTRACT**

**Background:** A pharmacy is a means of pharmaceutical services carried out by pharmacists. Mazaya Pharmacy is one of the pharmaceutical service facilities in the city of Bogor. To date, in-person medication administration is the dominant service provided by pharmacies. However, growing demand for diverse services compels pharmacies to expand their offerings included new alternatives to serve customers, such as home delivery services.

**Purpose:** The results of the analysis are that customers have difficulty buying medicine because they cannot come to the pharmacy directly. or example eElderly customers, young working couples, customers with limited transportation, and customers with certain emergency conditions.hard to come.

**Methodology/approach:** This research aims to analyze the problems faced by customers, using the Design Thinking method approach to find solutions to customer problems.

Conclusion: Therefore, this problem can be solved if there is a special service that can solve this customer problem. Mazaya Pharmacy developed a solution in the form of a drug delivery service by utilizing communication facilities via the WhatsApp Business application. The aim of this service is expected to ake it easier for customers to buy medicines by ordering medicines with a delivery service. This delivery service can be an added value in improving the quality of service at the Mazaya Pharmacy which can increase customer satisfaction and loyalty and expand the pharmacy's coverage area..

Keywords: customer, delivery service, medicine, pharmacy, pharmaceutical services

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# INTRODUCTION

Pharmacy is a means of pharmaceutical services where pharmaceutical practices are carried out by pharmacists. Pharmaceutical Service is a direct and responsible service to patients related to pharmaceutical preparations with the aim of achieving definite results to improve the quality of life of patients (Permenkes, 2016).

Covid-19 has put pressure on the entire world and posed new challenges to healthcare systems in developed and developing countries. On the other hand, significant improvements in pharmaceutical services are recognized, using innovative approaches to improve the quality of pharmaceutical services. The main goal of innovative pharmacist problem-solving is for patients to connect virtually with pharmacists regarding their medication management. Several pharmaceutical service initiatives such as home delivery of medicines have been successfully implemented, as reported in many countries (Abu-Farha et al. 2023).

Currently, patients generally come to the pharmacy to buy medicine. However, the need to serve widely encourages pharmacies to expand their services, with the addition of new alternatives for patients, such as medication delivery services. The need and importance of home medicine delivery services substantially stood out during the Covid-19 pandemic (Algarni et al. 2022). In the midst of the Covid-19 pandemic, the need for technology adoption has become increasingly relevant because many Usaha Mikro Kecil dan Menengah (UMKM) have suffered financial losses. Embracing technology enables remote working and maintaining while productivity, digital marketing costs compared to traditional methods. With fierce competition both inside and outside Asian countries, technology adoption is crucial for UMKM to reach the level of developed countries and remain competitive (Loo MK et al. 2023).

Indonesian people cannot leave their homes due to quarantine arranged by the government during the Covid-19 pandemic. As a result, pharmacies also have to adapt to pharmaceutical service innovations by providing home drug delivery services. As Covid-19 cases are increasingly under control, as well as the transition from pandemic to endemic in 2023, it encourages normalization of activities, including in regular (non-covid) health services. One of the directions

of Indonesia's health policy is to increase health security, especially through increasing the availability, independence and quality of pharmaceuticals and medical devices as well as strengthening the emergency system (Kemenkeu, 2023).

Patients need home care services not only during pandemics and quarantines but also in normal situations, especially in elderly patients, patients with disabilities, or those with chronic diseases and patients with certain conditions. In the private sector, innovation has become a necessity as a way to survive by maintaining consumer loyalty and winning market competition over its competitors (Setiarini & Lutfi, 2020).

Mazaya Pharmacy is one of the pharmaceutical service facilities located in North Bogor sub-district, Bogor city, West Java Province. The location of the pharmacy is quite strategic, being on the side of the main road and also around densely populated residential areas. Currently, Mazaya Pharmacy only sells medicines directly to customers who come to the pharmacy. Customers who come can also consult about medicines. Patients trust pharmacists to have the ability and capacity to provide appropriate drug information compared to looking for information on internet sites (Juwita et al. 2020).

The results of the problem analysis obtained from the customer side are obtained that customers have difficulty in buying drugs because they can not come directly to the pharmacy, especially customers with old age, young working couple customers, customers with limited transportation, and customers with certain emergency conditions. When patients find it difficult to come to the pharmacy, they often use online health application services with higher costs or they will wait for their families to come home from work, so that patients cannot immediately meet their medication needs. Apart from that, there are not many pharmacies around the North Bogor area that have drug delivery service facilities.

The problems that customers faced can be an opportunity for pharmacies to provide added value and improve service to customers. How pharmacies can analyze problems customers felt, how the right solutions to solve existing problems and how managerial implications can be applied by Apotek Mazaya. This study aims to analyze the problems faced by customers, through a methodical approach design Thinking to

find solutions to customer problems. Design Thinking is a complex process of designing the right solution to answer customer problems (Newell, 1988). Then develop strategies that can be applied managerially at Mazaya Pharmacy in improving customer service.

The development and solving of a problem in a business requires a different, structured and systematic way of thinking, with a design methodology that provides a solution-based approach to solving problems that can use the Design Thinking method approach. Engineering methods are concerned with the description, design, adaptation and evaluation of methods, using engineering principles (Katja & Roland, 2012).

This approach is principled on finding solutions by involving humans or customers in solving existing problems and focusing on human or customer needs. Therefore, this research includes efforts to find solutions for customers using the Design thinking method approach and develop managerial strategies.

## **METHODS**

This research consists of several stages, namely building empathy, defining problems and developing solution ideas. The research was conducted at Mazaya Pharmacy located on Jl. Pangeran Sogiri, North Bogor District, Bogor City. Customers who come directly buy drugs to pharmacies with a total of 10 people who are used as a sample population in research with the sampling technique used is the Saturated Sampling technique, which is a sampling technique if all members of the population are used as samples (Sugiyono, 2010).

Problem testing is carried out by Personal Interviews to customers, then analyzed using Empathy Map and Customer Journey Map tools then defining existing problems (Figure 1). Empathy as a unique means for us to understand and experience what it's like to be someone else, identifying fit yet effective, taking a other-oriented perspective, and the ability to view oneself as something separate are the three main traits of empathy (Coplan, 2011).

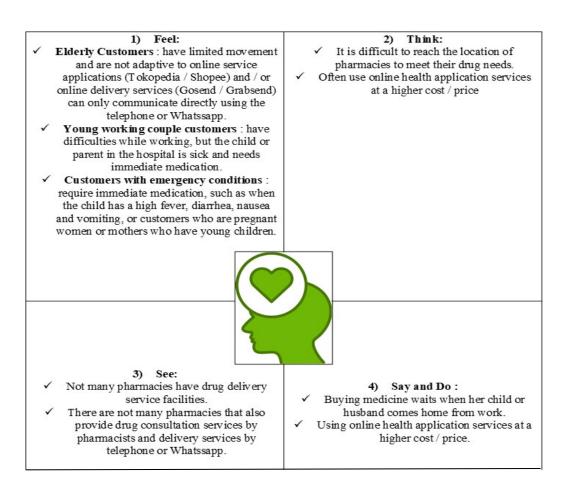


Figure 1. Emphaty maps

The results of this analysis can then help in finding solutions and developing ideas in overcoming customer problems as a result of all stages of the Design Thinking method that has been passed. Functional and emotional needs are equally important in the design process, and empathic design ideas are proposed to meet the real, not perceived, needs of users (Wang & Hwang. 2010). This research consists of several stages, building empathy, defining problems, developing ideas and solutions. The framework of this research can be seen in Figure 2.

#### **RESULTS**

# **Empathy**

Phase empathy carried out using two tools, First through the depiction of Empathy Maps conducted on Mazaya Pharmacy customers to be able this is done through Personal Interviews to be able to understand from the customer's point of view because it is influential in designing solution designs at a later stage. Explore customer attitudes and behaviors in domains of interest, helping customers to match customers with a deeper understanding. The mapping results get an overview of thoughts and feelings, what is heard and seen, activities carried out, problems and things to be obtained from customers. Second, through Customer Journey Map is a representation of customer experience when interacting with Mazaya Pharmacy in receiving its products and services.

## **Determine the Problem**

The define problem stage is carried out point of view user analysis (Mazaya Pharmacy customers) which produces a problem statement and user persona analysis is also carried out. Persona portrayal aims to create the character of a potential customer, a picture of a potential customer, visualization of customer goals, wants and needs and achieve a consistent understanding of the target group (Lewrick, 2022).

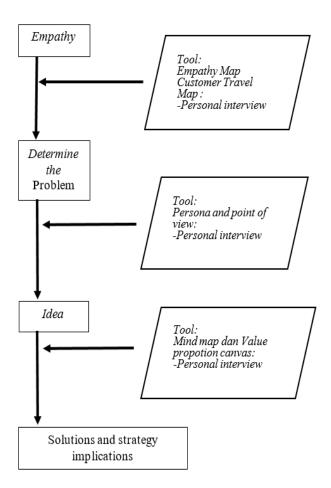


Figure 1. Research framework of mind

Persona is defined as a precise description of our user and what he or she wants to achieve (Cooper, 1999), or it can also be defined in a little more detail as a user model, or persona, is a fictional and detailed archetype character that represents differences (Calde et al. 2002).

It is described that the user persona of a potential customer of Apotek Mazaya is a customer of a mother with a problem of sick children and difficult to get medicine due to limitations. While the need for medicine is urgent. The desire expected from this customer can certainly get the medicine easily. Mazaya Pharmacy customer profile as Figure 3.

## **Ideation**

The third stage of the Design Thinking process is ideation. This stage is carried out brainstorming process for the creation of solutions to existing problems using two tools, namely the first Value Proposition Canvas, the second using a Mind map is a tool that can help to arrange thoughts when getting ideas, by developing thinking patterns from all directions and capturing various. Problem statement in Table 1.

Ibu Ida as a parent hopes that everything will be fine, feelings of frustration arise when their child is sick but Ibu Ida can't do anything. Not being able to leave her child to go out to find medicine even though immediate treatment is really needed. Ibu Ida needs help from someone who can communicate with her, who can help in buying medicine. Communication facilities via

Whatsapp chat can provide a way out for consultations, plus a delivery service is a solution for Mrs. Ida to get medicine.

From the results of brainstorming on potential solutions to customer problems, there is no means of connecting urgent needs and fast procurement. The need for delivery service facilities is a solution that can be added as an additional service from Mazaya Pharmacy. The solution offered is a drug delivery service to customers

#### **Solution**

One of effort to improve the quality of pharmaceutical services, Apotek Mazaya try to developed a solution for a drug delivery service, that by utilizing communication technology through the WhatsApp Business application. WhatsApp Business can be a useful platform for professional service delivery in improving communication and customer and pharmacy relations (Rathbone et al. 2020).

Ease of access in using WhatsApp Business, patients who need drugs can order the drugs they need without having to come directly to the pharmacy. Patients can consult where there is interaction between pharmaceutical officers and patients to provide drug information to improve patient safety (Widowati, 2021). Patients with the WhatsApp Business app can communicate with pharmacies to place medication orders.



Name : Mrs. Ida
Occupation : Housewife
Age : 37 years old
Address : Bogor utara
Family : Married, 3 children

## User Description:

Mrs. Ida is the wife of a working husband who works in Jakarta, every day Ida's mother lives with her three children at home. The first child is 4 years old, the second child is 2.5 years old, and the third child is 6 months old. Ida's mother cannot use motorcycles and cars.

# Frustation:

- · When the child is sick, high fever, diarrhea
- The stock of medicine at home is exhausted but can't leave the house
- · Have to leave the sick child out of the house.

#### Goals :

- There is a place to consult when the child is sick, the husband is sick
- · Drugs are available and get drugs quickly, and completely
- · Competitive drug price and guaranteed quality of drug
- · Easy and varied payment system

Figure 3. User Persona of Mazaya Pharmacy customers

Table 1. Problem statement

#### Customer

# **Problem Statement**

- 1. Have limited movement and are not adaptive to online service applications (Tokopedia / Shopee) and / or online delivery services (Gosend / Grabsend) can only communicate directly using telephone or Whatsapp.
- 2. Have difficulties while working, but the parent's child in the hospital is sick and needs immediate medication.
- 3. Difficulty in reaching the distance of the pharmacy location because they do not have a vehicle and / or difficulty using public transportation / online.
- 4. Immediate need for medication, such as when the child is sick with high fever, diarrhea, nausea and vomiting or customers of pregnant women or mothers who have small children.

Here are some of the advantages of using WhatsApp Business in the process of drug delivery services, namely convenience, where WhatsApp Business can provide convenience to pharmacy patients, because, they can order drugs at any time. By ordering drugs through WhatsApp Business, patients who need drugs can be more efficient in time, because ordering drugs through WhatsApp Business can reduce waiting times and patient queues when compared to visiting pharmacies physically and real-time communication between pharmacists and patients, where this can include several important elements, such as patient questions, consultation of drug issues, recommendations for effective drugs and related to the correct and safe use of drugs (Ivosights, 2023).

Flow begins with the patient contacting the pharmacist via Whatsapp Business, then the pharmacist screens the patient's prescription or drug request and also provides free drug consultation services. If medication is available, confirm the price and availability of the drug to the patient. Furthermore, the patient will make payment via transfer, then the drug will be packaged and delivered by the pharmacy staff. If the medicine is not available, the pharmacy will offer other alternative drugs and furthermore, if the patient agrees, then the patient must make payment by transfer then the medicine is delivered to the patient's home. For drug purchases of at least thirty thousand rupiah and with a distance of 4 km from the pharmacy location, free shipping will be obtained. For patients outside the coverage area, delivery will be send by Go send or Grab express, and delivery order is placed by the pharmacy and the cost is charged to the patient. Then the pharmacist also provides an explanation of the rules for using the medicine and will confirm that the medicine has been delivered and the patient will receive the medicine. Furthermore, pharmacies can store customer numbers and purchase history from customers, which will make it easier for pharmacies and customers to reorder drugs that have been purchased at pharmacies. Delivery service flow chart in Figure 4.

This study shows that community pharmacy staff believe that drug delivery serviceswill improve medication compliance. Respondents who participated in this study gavea clear vision about their expectations about home delivery services provided by communitypharmacies in Saudi Arabia. In the future, home delivery services may largely replacethe tradition of in-person pharmacy visits. However, according to the surveyed community (Abu-Farha et al. 2023).

# CONCLUSIONS AND RECOMMENDATIONS

#### **Conclusions**

The conclusion of this study is that the problem faced by customers is that customers have difficulty in buying drugs because they cannot come directly to the pharmacy, especially customers with old age, customers of young couples who work, customers with limited transportation, and customers with certain emergency conditions. The drug delivery service through the WhatsApp Business application is the right solution to existing problems because it is expected to provide convenience in how customers order drugs through drug delivery services at Mazaya Pharmacy, so that customers can immediately get drugs to overcome their pain. The existence of this drug delivery service can also improve the quality of service at Mazaya Pharmacy which leads to increased customer satisfaction and loyalty and expands the pharmacy's coverage area.

## Recommendations

For further research are to carry out the next stages of prototyping and testing, conduct evaluations from the perspective of the person making the delivery, packaging, and calculating the delivery time to be made into a standard operational procedure.

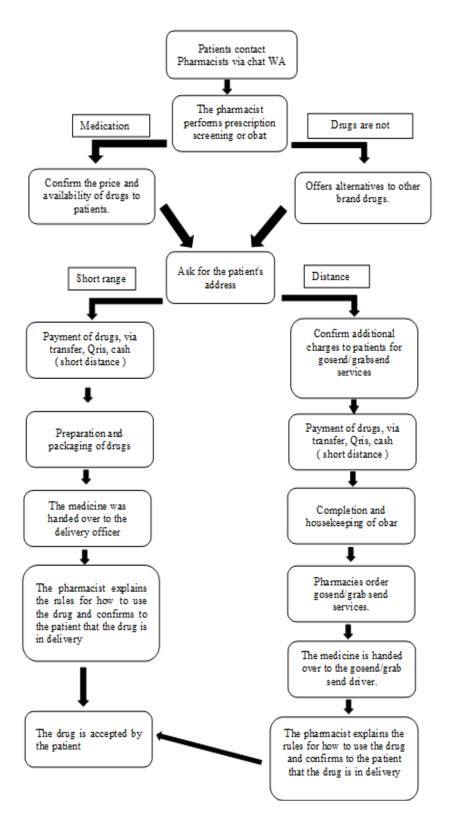


Figure 4. Delivery service flow chart

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# REFERENCES

Abu-Farha R, Alzoubi KH, Mukattash T, Karout S, Nassar RI, Barakat M. 2023. Public perceptions about home delivery of medications service in Lebanon: A cross-sectional survey. *Electronic Journal of General Medicine 20*(1). https://doi.

- org/10.29333/ejgm/12635
- Algarni MA, Alsheikh MY, Fathelrahman AI, Alzaidi MS, Faqeeh FJ, Althobaiti AM, Alshahrani AM. 2022. Home drug delivery service from the perspective of community pharmacy staff in Saudi Arabia. *Pharmacy* 10(6): 162. https://doi.org/10.3390/pharmacy10060162
- Buchanan R. 1992. Wicked problems in design thinking. *Design issues* 8(2): 5-21. https://doi.org/10.2307/1511637
- Calde S, Goodwin K, Reimann R. 2002. SHS Orcas: The first integrated information system for long-term healthcare facility management. In *Case studies of the CHI2002*| *AIGA Experience Design FORUM* (pp. 2-16). https://doi.org/10.1145/507752.507753
- Chen R, Liu J. 2015. Personas: Powerful tool for designers. *Design Thinking: New Product Development Essentials from the PDMA*, 27-40. https://doi.org/10.1002/9781119154273.ch3
- Coplan A , Goldie P. 2011. *Empathy: Philosophical and Psychological Perspectives*. Oxford: Oxford University Press. https://doi.org/10.1093/acprof:oso/9780199539956.001.0001
- Copper A. 1999. The inmates are running the asylum: why high-tech products drive us crazy and how to restore the sanity. *SAMS*.
- Engberts F, Borgman H. 2018. Application of design thinking for service innovation: Current practices, expectations and adoption barriers. Proceedings of the 51st Hawaii International Conference on System Sciences.
- Ivosights. 2023. Mempermudah Pemesanan Obat di Apotek melalui WhatsApp Business API. https://ivosights.com/read/artikel/whatsapp-business-api-mempermudah-pemesanan-obat-di-apotek-melalui [2024 Maret 10].
- Juwita FI, Widayati A, Istyastono EP. 2020. The use of internet and social media for drug information services in pharmacies in Yogyakarta Province: a study of asthma care. *Jurnal Farmasi Sains Dan Komunitas* 17(1): 59-68. https://doi.org/10.24071/jpsc.002181
- [Kemenkeu] Tim Kementrian Keuangan Republik Indonesia Informasi APBN 2023 Peningkatan Produktivitas Untuk Transformasi Ekonomi Yang Inklusif dan Berkelanjutan. 2023.
- Lewrick M. 2022. Design Thinking For Business Growth: How To Design and Scale Business Models And Business Ecosystems. John Wiley & Sons.

- Liedtka J, Salzman R. 2018. Applying design thinking to public service delivery. *IBM Center for The Business of Government*.
- Loo MK, Ramachandran S. Raja YRN. 2023. Unleashing the potential: Enhancing technology adoption and innovation for micro, small and medium-sized enterprises (MSMEs). *Cogent Economics & Finance 11*(2): 2267748. https://doi.org/10.1080/23322039.2023.2267748
- Mustangin M, Tukirin T, Wibowo EW, Sugianto E, Estiana R. 2022. Analisis citra merek dan kepuasan pelayanan terhadap loyalitas konsumen pengguna aplikasi pesan antar makanan. *JUDICIOUS 3*(2): 288-292. https://doi.org/10.37010/jdc.v3i2.1109
- Newell A, Simon HA. 1988. The theory of human problem solving. Collins, AM, & Smith, EE (Eds.) Readings in cognitive science: A perspective from psychology and artificial intelligence. https://doi.org/10.1016/B978-1-4832-1446-7.50009-1
- Newen A. 2014. Understanding others: The person model theory. In *Open mind*. Open MIND. Frankfurt am Main: MIND Group.
- Paek SH, Alabbasi AMA, Acar S, Runco MA. 2021. Is more time better for divergent thinking? A meta-analysis of the time-on-task effect on divergent thinking. *Thinking Skills and Creativity 41*:100894. https://doi.org/10.1016/j.tsc.2021.100894
- [Permenkes] Peraturan Menteri Kesehatan Republik Indonesia Nomor 73 Tahun 2016 Tentang Standar Pelayanan Kefarmasian di Apotek. 2016.
- R. J. Welke, K. Kumar. 1992. Method Engineering: a proposal for situation-specific methodology construction, in Systems Analysis and Design: A Research Agenda, S. Cotterman, Ed. Chichester: Wiley
- Rathbone AP et al. 2020. Exploring the use of WhatsApp in out-of-hours pharmacy services: a multi-site qualitative study. *Research in Social and Administrative Pharmacy 16*(4): 503-510. https://doi.org/10.1016/j.sapharm.2019.06.019
- Braun C, Wortmann F, Hafner M, Winter R. 2005. Method construction-a core approach to organizational engineering. In *Proceedings* of the 2005 ACM symposium on Applied computing (pp. 1295-1299). https://doi.org/10.1145/1066677.1066971
- Setiarini D, Lutfi A. 2020. Adopsi Inovasi Layanan Antar Jemput Ijin Bermotor Pelayanan Terpadu

- Satu Pintu Provinsi DKI Jakarta. *Publik (Jurnal Ilmu Administrasi)* 8(2): 136-144. https://doi.org/10.31314/pjia.8.2.136-144.2019
- Siricharoen WV. 2021. Using empathy mapping in design thinking process for personas discovering. In Context-Aware Systems and Applications, and Nature of Computation and Communication: 9th EAI International Conference, ICCASA 2020, and 6th EAI International Conference, ICTCC 2020, Thai Nguyen, Vietnam, November 26–27, 2020, Proceedings 9 (pp. 182-191). Springer International Publishing. https://doi.org/10.1007/978-3-030-67101-3\_15
- Thoring K, Müller RM. 2011. Understanding design thinking: A process model based on method engineering. In DS 69: Proceedings of E&PDE 2011, the 13th International Conference on Engineering and Product Design Education, London, UK, 08.-09.09. 2011 (pp. 493-498).
- Widowati IGAR, Pradnyaparamita-Duarsa D, Putu-Januraga P. 2021. Perceptions of the role of pharmacy assistants in providing patient counselling in community pharmacies in Indonesia. *Medical Studies/Studia Medyczne* 37(2): 117-124. https://doi.org/10.5114/ms.2021.107455