

Product Development Framework for Ginger Tea

Nada Widyanto Rizki ^{*1}, Febriantina Dewi¹, Anita Primaswari Widhiani¹

¹*School of Business IPB University Bogor, Indonesia*

**Corresponding author e-mail: nada_wrizki@apps.ipb.ac.id*

ABSTRACT

One of the popular ginger-based products in Indonesia is ginger tea. It is believed that ginger can boost immune system. Targeted customers are adults under 50 years old, who will go back to work at the office for new normal era at this covid-19 pandemic. The purpose of this study was to develop ginger tea product for the targeted customers using customer discovery and business model canvas. According to targeted customers, previously available products' taste is not fresh, lack of pungent and spicy taste of ginger, not packaged properly so it loses its warmth, difficult to get and not enough information available on the products. The proposed product and its business model are done in one iteration. The result shows that targeted consumers are interested in the proposed product's value proposition. The proposed ginger tea product is seen as fresh with functional and attractive packaging, easy to get and clear product information.

Keywords— *customer discovery, business model canvas, ginger tea*

I. INTRODUCTION

During the Covid-19 pandemic, people become more concerned about health. One way to boost immune system is to consume spices, such as ginger. Ginger is a common Indian spice and traditional medicinal plants have important pharmacologic activities such as antibacterial, antiviral, anti-hypertensive, antioxidant, analgesic and antipyretic properties [1]. The content of *gingerol* and *shogaol* in ginger is beneficial for boosting immune system and preventing disease, bacteria and viruses, where *6-gingerol* from the ginger plant is a potential ingredient for treating Covid-19 [2][3].

Indonesian are known to consume ginger, not only as spice, but also a healthy beverage in the form of ginger tea [4]. The targeted customer for this product development is young customers, mainly workforce 50 years old and under [5]. In the new normal era during this covid-19 pandemic, workers under 50 years old are expected to go back working at the office [6]. That means that they must keep their immune system in check. Young customers are prevalent to adopt healthy back to nature lifestyle and select their products accordingly [7]. Targeted customers are more likely to consume functional beverages more times than consumers of other age groups [8].

There are powdered ginger tea products available on the market. It is not ready to drink and added with sugar content for improving the taste and keeping long shelf life [9]. The coloration of the powdered ginger tea concoction is considered not natural by the targeted customer. There are herbal kiosks that also sell ginger tea. The ginger tea sold there are basically powdered ginger tea solution mixed with other spices [10]. Targeted customers rarely choose this kind of ginger tea concoction when going to such kiosks.

Targeted customers expect fresh ready to drink ginger tea. This shows a business opportunity to develop such product that suit consumer preferences using

customer discovery approach. The research problems are: (1) what are consumers problems with previously available ginger tea products (2) how to develop a product that provide solution to targeted customer's problem and (3) what business models needed for developing such products.

II. MATERIALS AND METHODS

This study uses customer development approach with focus on customer discovery in four stages, define a hypothesis, testing the customers problem, testing the solution, and verifying the business model [11]. Data collected through in-depth interview and survey of 56 respondents of targeted consumers segment. Data analyzed by transcription, reduction, categorization and ranking.

III. RESULTS

All respondents consume ginger tea because of its benefit, mainly during bad weather or when they are feeling under the weather. They like the pungent and spicy taste of ginger. Ginger tea is also a common beverage to drink during social occasions with family and friends.

Available products are considered not fresh, its concoction have weird coloration and not ready to drink. Consumers are expecting fresh and hot/warm ready to drink ginger tea that still maintain the pungent and spicy nature of ginger with natural transparent coloration.

Based on in depth interview, thirty respondents recall that they do not like the taste of previously available products. Some customers think that those products are unnaturally too spicy while others think that those products do not reflect the spiciness of ginger. Some customers like ginger tea concoction mixed with other herbs.

Twenty-six respondents do not like the packaging

they get when they buy ginger tea concoction at herbal drink kiosks due. The packaging is a thin plastic glass that hard to carry and not secure enough to prevent spillage. Consumers have concern of the negative health effect of using plastic for hot beverage container. Consumers expects an easy to carry packaging that can maintain the warmth of the ginger tea.

Twenty respondents do not go to herbal drinks kiosks due to the distance. Sixty six percent of respondents like to go to this kiosk though because it is considered as a place of hangout. Thirty percent of respondents like to get ginger tea through delivery service.

Ten respondents think that the information given in the powdered ginger tea packaging is not clear, especially on how to make the perfect concoction, how to store it properly to maintain long shelf life, nutrition content and suggested daily intake.

The proposed product prototype is fresh ready to drink ginger tea, that can be bought either with delivery service of coming to available kiosks. The first feature is concoction variants, where customer can choose between pure ginger tea or mixed herbs ginger tea with the base of white or red ginger. Customer also can choose the amount of ginger on the concoction to get the right level spiciness according to their liking. Consumers can choose for delivery services. There is also a filling only option, where customer can bring their own tumbler to the kiosk. The proposed packaging are paper cups with paper sleeves and glass bottle to maintain heat and reduce spilling with clear information. The proposed packaging is shown in Figure 1.



Fig 1. Packaging prototype

Based on prototype testing, consumers like the available variants with preference of red ginger as concoction base. Red ginger is considered has more fragrant aroma and has a distinctive taste when processed into ginger tea. Consumers would like to have ginger concoction mixed with lemon, honey and milk. Consumers expect natural product without preservatives.

Ninety seven percent of respondents choose paper cup with sleeve. They like the prototype packaging design because it is seen feasible, attractive, trendy, and safe. Consumers would like two cup sizes provided for more option. Ninety five percent of respondents like bring your own tumbler feature where they expect lower price on the product if they opt for this feature.

Consumers also like the availability of ginger tea kiosk, with preferred location at campus, office buildings

and mall food court. Consumer prefers to buy at kiosk because they like to have hot ginger tea, though they think it is nice to have delivery option, especially at this pandemic time.

Sixty nine percent of respondents are willing to pay Rp 10,000 for a cup of 150ml ginger tea. The rest of the respondents are willing to pay up to Rp20,000. Respondents are willing to pay more for additions.

The proposed prototype brand names are Syiger, Jakhe, and Inijakhe. Most customers like Syiger as brand name because it is seen as combination of the words „segar“ (Indonesian word for „fresh“ or „in good health“) and ginger. The name is perceived of having positive connotation to fresh product and good health. The orange colored ginger on of the logo is seen attractive.

Eighty nine percent of the respondent consider the proposed product prototype can solved the problem they have with previously available product.

Actually, respondents prefer kiosk as the channel, although because of this pandemic, customer opt for delivery service through Go Food. During the pandemic, advertisements for this product will be placed on news media that covers day to day coverage of the pandemic.

The business model canvas of the proposed product is shown in Figure 2.



Fig 2. Verified BMC

IV. DISCUSSION

Functional beverage must fulfill two main functions of functional food: nutritional function, as the primary function and sensory satisfaction as the secondary function [12][13]. The proposed product is fresh and with optional additions. This feature will fullfill those two functions.

There are four indicators in product knowledge, namely product attributes, functional benefits, psychological benefits, and values. Product knowledge includes subjective knowledge (how many consumers know a product); objective knowledge (how much information and type of information contained in consumer memory) and experience-based knowledge (how much experience consumers have in purchasing and using of a product) [14]. The level of product knowledge will influence consumer purchasing decisions [15]. The proposed product provides objective knowledge, given through the product packaging or on

the advertisements.

Journal of International Management Studies. vol. 2(13). 121-132, August 2007.

V. CONCLUSION

Targeted consumers have problems with previously available products on their freshness, taste, packaging, availability and product information. The proposed product is fresh ginger tea with features that will serve nutritional and sensory satisfaction as a solution to targeted consumers; problems. The business model for proposed product emphasizes on customization for value proposition, delivery option and advertisement on day to day news media coverage of the pandemic as the channel.

ACKNOWLEDGMENT

Many thanks to Dr. Joyo Winoto for his inputs to earlier version of this article.

REFERENCES

- [1] MO. Hara, D. Kiefer, K. Farrell, and K. Kemper, "A review of 12 commonly used medicinal herbs, arcgh," *Family meds.* vol. 7. 523- 536, November-December 1998.
- [2] S. Dugasani, MR. Pichika, VD. Nadarajah, MK. Balijepalli, S. Tendra, and JN. Korlakunta, "Comparative antioxidant and anti-inflammatory effect of [6] *gingerol*, [8]-*gingerol*, [10]-*gingerol* and [6]-*shogaol*," *Journal of Ethnopharmacology.* vol. 127(2). 515-520, October 2009.
- [3] T. Rathinavel, P. Srinivasan, and S. Thangaswamy, "Phytochemical 6-gingeril –a promising drug of choice for COVID-19. *International* ,," *Journal of Advanced Science and Engineering.* vol. 6(4). 1482-1489, May 2020.
- [4] AT. Septiana, M. Samsi, and M. Mustaufik, "Pengaruh penambahan rempah dan bentuk minuman terhadap aktivitas antioksidan berbagai minuman tradisional Indonesia," *Agritech.* vol. 37(1). 7-14, February 2017.
- [5] Copenhagen Business School, *Sustainable Consumption and Consumer Behaviour.* Copenhagen, DK: CBS, 2012.
- [6] Keputusan Menteri Kesehatan Republik Indonesia Nomor HK.01.07/MENKES/328/2020 , Tentang Panduan Pencegahan dan Pengendalian *Corona Virus Disease* 2019 (COVID-19) Di Tempat Kerja Perkantoran dan Industri Dalam Mendukung Keberlangsungan Usaha Pada Situasi Pandemi.
- [7] G. Razai, PK. Teng, Z. Mohamed, and MN. Shamsudin "Functional food knowledge and perceptions among young consumers in Malaysia," *International Journal of Social, Behavioral, Educational, Economic, Business, and Industrial Engineering.* vol.6(3). 307-312.
- [8] Glanbia Nutritionals, *Consumer Survey* – November 2019.
- [9] W.Sukmawati, and Merin, "Pelatihan pembuatan minuman herbal instan untuk meningkatkan ekonomi warga," *Jurnal Pengabdian Kepada Masyarakat.* vol. 25(4). December, 2019.
- [10] Aditya, A. Ali, DF. Ayu, "Functional drinks from ginger instant powder (*Zingiber officinale R.*) with addition of an extract of beets root (*Beta vulgaris L.*) as natural coloring," *Sagu.* vol. 17(2). 9-17, September 2018.
- [11] S. Blank, and B. Dorf, *The Step-By-Step Guide For Building A Great Company.* Jakarta, ID: Elex Media Komputindo, 2012.
- [12] N. Herawati, Sukatiningsih, and WS. Windrati, "Pembuatan minuman fungsional berbasis ekstrak kulit buah naga merah (*Hylocereus polyrhizus*), rosela (*Hibiscus sabdariffa L.*), dan buah salam (*Syzygium polyanthum wigh walp.*)," *Agrotek.* vol. 6(1). June 2012.
- [13] Astawan M. 2011. Pangan fungsional untuk kesehatan yang optimal. Fakultas Teknologi Pertanian IPB, Bogor.
- [14] RN. Manuarang, and MK. Mawardi, "Pengaruh *product knowledge* terhadap *purchase intention* (Survei pada pengunjung toko buku UB Press, Kota Malang)," *Jurnal Administrasi Bisnis.* vol. 55(3). February 2018.
- [15] NH. Lin, and B.S Lin, "The effect of brand image and product knowledge on purchase intention modersted by price discount,"