



HAMBURGER CASSAVA, THE SOLUTION OF TODAY'S FOOD CHOICES IN THE GLOBAL ERA, UTILIZING INDONESIA'S NATURAL RESOURCES

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ABSTRACT

Cassava is a food raw material that is very much in existence in Indonesia. The ease of finding these raw materials makes the cassava commodity quite affordable for the community. Even considered as affordable food. Burger making is a solution for food products with a contemporary menu but at affordable prices for all people. This is a business opportunity with the hope of offering modern food at affordable prices, lime star quality, street prices. This study aims to analyze the income and strategy of developing sweet potato plants as a supporter of the food entrepreneurship program in West Sumatra. In this study, sweet potato, namely cassava, will be used as a new food business. This study uses the direct method. The first problem in this study uses the SWOT (Strength, Weakness, Opportunity and Threat) method. The variety of flavors is different from most other burger business products, such as BBQ, Balado, Spicy and others, the price of cassava hamburger is Rp. 10,000.

Keywords: Cassava; Hamburger; Food; Natural Resources

1. INTRODUCTION

Burger is one of the foods that can be consumed anytime [1][2]. This food is loved by everyone. Best served warm. Burger production is interesting because the processing activities can be seen directly by consumers, so that the standards for achieving hygiene and sanitation are an important concern. Cassava is a food raw material that is very much in existence in Indonesia. The ease of finding these raw materials makes cassava commodities quite affordable for the community [3] [4]. It is even considered an affordable food. The new cassava processing is focused on making chips and the like. It is necessary to develop or fortify processed cassava to increase its selling value. Making burgers is a food product solution with a contemporary menu but at an affordable price for all people [5]. This is a business opportunity in the hope of offering modern food at affordable prices, lime star quality, street prices. Based on the above background, we make a business establishment proposal.

2. LITERATURE REVIEW

2.1 Market Opportunity

Selling products at affordable prices by the public. And offer this product via online and also directly to colleagues or college friends. The benefits of this business include that we can get financial benefits with this business. Besides, we can provide jobs for other people. We can also help cassava/yam farmers who are partnered by marketing the cassava they have produced.

2.2 Business Purpose

Get profit/profit from this product, achieve sales targets, meet secondary needs for all circles, Utilizing environmental waste that has not been utilized and instilling an attitude of concern for the environment [6] [7]. To become one of the successful culinary businesses in West Sumatra with a high turnover so that it can open many branches in Indonesia and accommodate many employees and the purpose of this proposal is to make a product that can be enjoyed without having to spend a lot of money and can become a favorite food and healthy food to be consumed in any condition and time as well as on occasions [8]

2.3 VISION

Provide a new style of chip products to satisfy consume, get the maximum profit and become one of the most successful culinary businesses in West Sumatra, and even Indonesia [9].

2.4 Mission

to become a leading business in providing great satisfaction in dishes for consumers and customers, make quality products or snacks, continue to innovate in creating chips with unique and interesting shapes [8]. creating creative forms and ideas to attract buyers, provide good and friendly service in an effort to attract buyers and selling products at affordable prices but with stunning quality and taste [10].

3. EXPERIMENTAL

The main target of this effort is Padang State University Students. In addition, the outside community around the Padang State University campus will also be our targets. Because this business is a secondary need that is common and quite often used, the target of this business is for all people of all ages, both men and women, children, teenagers, adults to the elderly. And the main target of this business is all students of Padang State University and then we will develop this business so that it can spread to the surrounding community. The target market of this product includes children, teenagers, adults while the area is around campus and public places [11] [12].

Production locations and marketing locations Around the Padang State University Campus. Because, this location is very strategic because it is close to the highway that is easily visited by

consumers, besides that it is close to schools and public transportation stops which may make it easier to attract consumer interest in the products I offer. The preparatory activities to be carried out include the schedule of activities, market survey activities, making contracts with the providers of funds.

Production Raw Materials is Chicken breast, Beef, Cassav, Flour, Tapioca flour, Chicken Egg, Salt, Pepper powder, Flavoring, BBQ Flavor, Balado flavour, Sesame seeds, Lettuce, Tomatoes, Cheese, Sauce, Margarine, Cucumber and Onion. Steps of the Manufacturing Process is Grate cassava until smooth, Grind the meat and chicken breast until smooth [13] [14]. After that, mix the tapioca flour and wheat flour into the cassava which has been grated, Stir until it becomes dough. Next add the meat or chicken breast to taste and the mix well [15]. Shape the dough using a meat press. after it is formed like meat, then we steam it for 15 minutes remove and cool Cassava Nugget is ready [16].

After all the above preparations have been done properly, then this betel leaf chip business can be implemented and started. And marketing is also done by making brochures and distributing them to people, making business banners, and creating business accounts on Instagram, Facebook. The marketing strategy we use in this business is : conduct market or customer introduction, choosing the right marketing location, utilizing social media in the promotion process, doing interesting promotions and provide attractive innovations to businesses [17] [18].

4. RESULTS AND DISCUSSION

4.1 Results

Tabel 1. SWOT Analyze

STRENGTH :	
Product design	The product design that we have has a special characteristic, namely: with the use of blue, the word ubi is emphasized to show that it is made from sweet potatoes and there is a picture of the sweet potato as well [19] [20].
Promotion and advertising	For promotions and advertisements, we have often done paid media promote to social media accounts that are well known and have many followers.
Distribution speed	Speed in distribution can be done quickly and easily efficient.
Service friendliness	The hospitality given to the customer is very important, because it is a form of good service.
Special skill level	Development and quality maintenance of food ingredients used in the manufacture of UBISKYY products [21].
Administration system	From the management system we use the administration system.
Production planning	We plan to make new products anyway made from sweet potatoes but there are new innovations that make our products

	different from sweet potatoes in general
Use of technology modern	The services provided are online-based with using LINE Official Account

Tabel 2. Opporrtunities Tabel

OPPORTUNITIES :	
Competition: Services Engaged in the same field	This service competition already exists in the external environment
Capital: Ease of getting a loan	campus but customers still believe in fried Oreos because this innovation is still rarely found.
Market opportunity	We always open opportunities for anyone who wants to be a partner in this business.
Market Access and Information Market Demand Market Behavior	product because of its taste and appearance attract the attention and interest of consumers.
Technology advances Technological development Production	The more android smartphone users, the greater the opportunities for this business. And it makes it easier for consumers to place orders.
Labor Labor Availability According to the needs	For riders to deliver orders to consumer.
Local communities People's Attitude towards Product	Positive response from the community when we are able to provide satisfaction to consumers by making this product fit on the tongue of the community .

4.2 Discussion

Indonesia has soil that is rich in minerals and fertile with natural resources, and it is very good for agriculture [22]. Cassava is one of the results of cultivation from agricultural businesses that have sufficient food availability, stable food availability without seasonal or year fluctuations, affordability of food ingredients, and quality. and food safety [23]. Cassava is a food that contains a lot of protein, fat, minerals, vitamin B, vitamin K, fiber, as well as a very high calorie content and can last longer if consumed [24] [25]. Cassava plants can be planted in wet or dry soil areas and can grows at an altitude of up to 800 meters above sea level [16].

As our human resources, the PKM-K proposer has the potential to be able to process food made from cassava, management and have good relations with several entrepreneurs in the field of food and cooking, making it possible to make a business in the production and marketing of burger products from cassava [26] [27]

As explained earlier, this business is a completely new business in the market. Therefore, we tried to package and make this food different and interesting again [28] [7]. This Sweet Potato

Nugget Burger business has several advantages, including: Different flavors from most other burger business products, such as BBQ, Balado, Spicy and others. It is safe for consumption for all ages and also contains various nutrients found in cassava. The texture is a little chewy because it is made of sweet potato/cassava which is shaped like a burger in general. Very affordable price. The production process is hygienic and having unique packaging [29] [6] [30].

5. CONCLUSION

A great innovation is never separated from a simple creative idea. Although the betel leaf chips seem simple, if they are combined with a creative and innovative mindset, it is not impossible if this series can be a great solution that really helps us in doing business in the cake business with big profits. As good entrepreneurs, we will not let this business run flat. We will continue to try to improve the quality of our work, so that enthusiasts or consumers are satisfied with the service and taste of the chips we make. Because if the quality of our chips is not improved, most likely this business will not progress and is in danger of going bankrupt.

REFERENCES

- [1] H. L. Tuomisto, "The eco-friendly burger," *EMBO Rep.*, vol. 20, no. 1, pp. 1–6, 2019, doi: 10.15252/embr.201847395.
- [2] M. Vargas-Ramella *et al.*, "Physicochemical composition and nutritional healthier oils," *Foods*, vol. 9, no. 571, pp. 1–17, 2020.
- [3] G. Byju and G. Suja, "Mineral nutrition of cassava," *Adv. Agron.*, vol. 159, pp. 169–235, 2020, doi: 10.1016/bs.agron.2019.08.005.
- [4] H. Ceballos, C. Rojanaridpiched, and C. Phumichai, "Excellence in Cassava Breeding: Perspectives for the Future," *Crop Breeding, Genet. Genomics*, pp. 1–31, 2020, doi: 10.20900/cbagg20200008.
- [5] I. P. V. L., "PEMBUATAN PATTY DENGAN BAHAN DASAR MAKING A PATTY WITH RED BEAN BASIC MAKING A PATTY WITH RED BEAN BASED," vol. 01, no. 01, pp. 85–98, 2022, doi: 10.20900/cbagg20200008.
- [6] S. S. T. Asral and R. Zainul, "Pengembangan Konten Pembelajaran E-Learning untuk Materi Larutan Elektrolit dan Non Elektrolit Menggunakan Aplikasi Moodle," *Entalpi Pendidik. Kim.*, vol. 1, no. 1, 2020, doi: 10.24036/epk.v1i1.92.
- [7] R. Zainul *et al.*, "Development of e-Learning Courses for Subjects about 'Learn and Learning' with Moodle-based for Prospective Teacher in Indonesia," *J. Phys. Conf. Ser.*, vol. 1594, no. 1, 2020, doi: 10.1088/1742-6596/1594/1/012023.
- [8] J. Friedland, "Reframing the Purpose of Business Education: Crowding-in a Culture of Moral Self-Awareness," *J. Manage.*, vol. 31, no. 1, pp. 3–4, 2020, doi: 10.1177/014920630503100101.
- [9] W. Puriwat and S. Tripopsakul, "Explaining social media adoption for a business purpose: An application of the utaut model," *Sustain.*, vol. 13, no. 4, pp. 1–13, 2021, doi: 10.3390/su13042082.
- [10] D. I. Mattos, A. Dakkak, J. Bosch, and H. H. Olsson, "The HURRIER process for experimentation in business-to-business mission-critical systems," no. September, pp. 1–24, 2021, doi: 10.1002/smr.2390.
- [11] S. Mandar, D. Purnamsari, and R. Zainul, "Chatalytic activity of nano ZnO/Cu for degradation humic acid under illumination outdoor light," *J. Phys. Conf. Ser.*, vol. 1481, no. 1, 2020, doi: 10.1088/1742-6596/1481/1/012038.
- [12] N. A. Azis *et al.*, "Synergistic effect of zinc/aluminium-layered double hydroxide-clopyralid carbon nanotubes paste electrode in the electrochemical response of dopamine, acetaminophen, and bisphenol A," *Int. J. Electrochem. Sci.*, vol. 15, no. 9, pp. 9088–9107, 2020, doi:

- 10.20964/2020.09.04.
- [13] F. Binkowski, L. Zschiedrich, M. Hammerschmidt, and S. Burger, "Modal analysis for nanoplasmonics with nonlocal material properties," *Phys. Rev. B*, vol. 100, no. 15, pp. 1–6, 2019, doi: 10.1103/PhysRevB.100.155406.
 - [14] J. Burger *et al.*, "Eggshell: Ultra-thin three-dimensional printed formwork for concrete structures," *3D Print. Addit. Manuf.*, vol. 7, no. 2, pp. 49–59, 2020, doi: 10.1089/3dp.2019.0197.
 - [15] A. Schubert, T. Wassmann, M. Holtappels, O. Kurbad, S. Krohn, and R. B rgers, "Predictability of microbial adhesion to dental materials by roughness parameters," *Coatings*, vol. 9, no. 7, 2019, doi: 10.3390/coatings9070456.
 - [16] Hardeli, R. Zainul, and L. P. Isara, "Preparation of Dye Sensitized Solar Cell (DSSC) using anthocyanin color dyes from jengkol shell (*Pithecellobium lobatum* Benth.) by the gallate acid copigmentation," *J. Phys. Conf. Ser.*, vol. 1185, no. 1, 2019, doi: 10.1088/1742-6596/1185/1/012021.
 - [17] R. Zainul and S. W. Wardani, "The Performance of Hydrogen Generator based on a 4 / 4 Al-Cu Plates Designed," vol. 20, no. 1, pp. 100–104, 2019.
 - [18] R. Zainul, J. Effendi, and M. Mashuri, "Phototransformation of Linear Alkylbenzene Sulphonate (LAS) Surfactant Using ZnO-CuO Composite Photocatalyst," *KnE Eng.*, vol. 1, no. 2, p. 235, 2019, doi: 10.18502/keg.v1i2.4448.
 - [19] F. Tao *et al.*, "Digital twin-driven product design framework," *Int. J. Prod. Res.*, vol. 57, no. 12, pp. 3935–3953, 2019, doi: 10.1080/00207543.2018.1443229.
 - [20] Z. Hong, H. Wang, and Y. Gong, *Green product design considering functional-product reference*, vol. 210, 2019.
 - [21] Z. Liu, K. W. Li, B. Y. Li, J. Huang, and J. Tang, "Impact of product-design strategies on the operations of a closed-loop supply chain," *Transp. Res. Part E Logist. Transp. Rev.*, vol. 124, pp. 75–91, 2019, doi: 10.1016/j.tre.2019.02.007.
 - [22] W. M. Daryanto and S. Samidi, "Measuring the financial performance of enterprises under ministry of energy and mineral resources (EMR) an Indonesia experience," *Int. J. Eng. Technol.*, vol. 7, no. 3, pp. 16–23, 2018, doi: 10.14419/ijet.v7i3.21.17086.
 - [23] C. Ruiz-Capillas and A. M. Herrero, "Impact of biogenic amines on food quality and safety," *Foods*, vol. 8, no. 2, 2019, doi: 10.3390/foods8020062.
 - [24] A. L. Tardy, E. Pouteau, D. Marquez, C. Yilmaz, and A. Scholey, "Vitamins and minerals for energy, fatigue and cognition: A narrative review of the biochemical and clinical evidence," *Nutrients*, vol. 12, no. 1, 2020, doi: 10.3390/nu12010228.
 - [25] A. G. Godswill, I. V. Somtochukwu, A. O. Ikechukwu, and E. C. Kate, "Health Benefits of Micronutrients (Vitamins and Minerals) and their Associated Deficiency Diseases: A Systematic Review," *Int. J. Food Sci.*, vol. 3, no. 1, pp. 1–32, 2020, doi: 10.47604/ijf.1024.
 - [26] E. Kambewa, "Cassava Commercialisation in Malawi," *MSU Int. Dev. Work. Pap.*, pp. 1–29, 2010, [Online]. Available: <http://www.aec.msu.edu>.
 - [27] J. H. Cock, "Cassava New Potential for a Neglected Crop," *F. Crop. Res.*, vol. 2, no. C, pp. 185–191, 1979, doi: 10.1016/0378-4290(79)90023-6.
 - [28] A. Firdaus and R. Zainul, "SESIUM KLORIDA (CsCl): TRANSPORT ION DALAM LARUTAN," 2018, doi: 10.31227/osf.io/rj6gy.
 - [29] Y. Yohandri, K. Khairunnisa, R. Ramli, and R. Zainul, "Development of a Digital Dip Coating System Based Microcontroller," *Eksakta Berk. Ilm. Bid. MIPA*, vol. 20, no. 2, pp. 62–69, 2019, doi: 10.24036/eksakta/vol20-iss2/204.
 - [30] D. Rahadian, D. D. Bhakti, P. Sidiq, and Y. Nugraha, "Study of Ruangguru application based on human computer interaction principles and paradigm," *J. Phys. Conf. Ser.*, vol. 1402, no. 7, 2019, doi: 10.1088/1742-6596/1402/7/077023.