Abstract—Fruters model is a concept of technopreneurship-based on empowerment, in which technology research results were designed to create high value-added products and implemented as a locomotive of collaborative empowerment; thereby, the impact was widely spread. This model still needs to be inventoried and validated concerning the influenced variables in the business growth process. Model validation accompanied by mapping was required to be applicable to Small Medium Enterprises (SMEs) agro-industry based on sustainable social business and existing real cases. This research explained the empowerment model of Yourgood, an SME, which emphasized on empowering the farmers/ breeders in farmers in rural areas, Cipageran, Cimahi, to housewives in urban areas, Bandung, West Java, Indonesia. This research reviewed some works of literature discussing the agro-industrial development associated with the empowerment and social business process and gained a unique business model picture with the social business platform as well. Through the mapped business model, there were several advantages such as technology acquisition, independence, capital generation, good investment growth, strengthening of collaboration, and improvement of social impacts that can be replicated on other businesses. This research used analytical-descriptive research method consisting of qualitative analysis with design thinking approach and that of quantitative with the AHP (Analytical Hierarchy Process). Based on the results, the development of the enterprise’s process was highly affected by supplying farmers with the score of 0.248 out of 1, being the most valuable for the existence of the enterprise. It was followed by university (0.178), supplying farmers (0.153), business actors (0.128), government (0.100), distributor (0.092), technopreneurship laboratory (0.069), banking (0.033), and Non-Government Organization (NGO) (0.031).

Keywords—Agro-Industry, small medium enterprises (SMEs), empowerment, design thinking, AHP, business model canvas, social business.

I. INTRODUCTION

CIPAGERN Village has potential for abundant milk production; however farmers/breeders there sell their produce inexpensively. Mostly, farmers/breeders sell their milk to cooperatives and brokers approximately Rp 3,700 – Rp 4,000 rupiah per liter. Based on that, they need value creation for the milk product to enhance the value and raise the sale price as well. In Cipageran village, a training program for processing milk was conducted, but it was only temporary. Cipageran village has good potential to develop and establish a yogurt manufacturing industry. The urge to improve the local economy of the Cipageran community was raised by a group of students when they visited the village. Thus, they initiated the SME Yourgood initiative on December 4th, 2014. Yourgood is an agro-industry-based SME operating in the dairy industry producing yogurt. Yourgood was pioneered in 2014 by Rizal Arafat, as the owner (Chief Executive Officer), and is located in Jalan Papanggungan No. 22., Kiara Condong, Bandung, West Java, Indonesia. Initially, Yourgood conducted continuous training on “how to make good quality yogurt”, as well as mentoring for the Cipageran community, especially the housewives of the village. Afterward, they tried to make yogurt with production capacity around 30 bottles per week. As production quality improved, production gradually increased to 250-500 bottles per week.

The brand name “Yourgood” was chosen because it similar or homophonic with yogurt, so customers know as soon as they hear it that the brand/product is associated with yogurt. The philosophy ‘Yourgood’ means “your kindness” and it is expected this product can give goodness to each stage in the value chain and in every situation. So, the aim is for each link in the chain (stakeholders) from upstream to downstream, to gain the benefit and goodness of this Yourgood product. Moreover, Yourgood has the motto ‘Always Be Your Dude’, which means it is always there for you; will always accompany you, anytime and anywhere.

Yourgood products differ from the other yogurt products, as it has higher viscosity. In addition, Yourgood products contain probiotic, while other yogurt products in the market use only bacteria in the production process. Moreover, they have a unique business model with a social business platform, which is based on strengthening collaboration and empowerment in many upstream agricultural activities.

II. METHODOLOGY

The research was conducted from February to June 2016 and gained a unique business model picture with the social business platform. From the mapped business model, there are several advantages such as (1) independence, (2) technology acquisition, (3) capital generation, (4) good investment increases, (5) strengthening of collaboration, and (6) improvement of social impact which can be replicated on
other businesses [1], [2]. The method used in this research was descriptive analysis with a design thinking approach, with qualitative and quantitative analysis using the AHP method [8]. In addition, this research used the approach of the action research method of the system that examined the collaborative, institutional relationship between SMEs with the community from upstream (rural) to downstream (city), which could be seen from behaviour based on the benefits chain implemented and efforts towards empowering the community in the environment. By measuring the variables of each institutional collaborative element that was inventoried in each SME based on community empowerment, then comparing behaviour and character, so that the model of empowerment from village to town was obtained [7].

![Fruters Model](image1)

**Fig. 1 Fruters Model [5]**

![Collaboration Model](image2)

**Fig. 2 The Collaboration Model [1], [4], [6]**

### III. RESULT AND DISCUSSION

#### A. Yourgood as a Business Social Enterprise Platform

Yourgood has developed a Fruters Model. A Fruters Model represents a chain of technopreneurship-based empowerment, in which the technology of the research results is designed as products with high added values and implemented as a locomotive for a wider collaborative empowerment [5] (Fig. 1).

Yourgood also uses the same collaborative model used by
Mrs. Popon, the owner of the “Ibu Popon” SME, which collaborates across a wide range of stakeholders, universities, business actors, technopreneurship laboratories, regional and central government, community, institution, and banking [1], [4], [6] (Fig. 2).

The way they collaborate is by making it a key partner to get the key resources they need. With these ways, which were collaborative and synergistic, they gain a variety of advantages to accelerate the various kinds of business [9].

B. Existing Business Model

The Yourgood existing business model canvas is based on the social business platform. The empowerment process departed from farmers and a group of female workers in the upstream (rural) to a group of female marketers in the downstream (city). In addition, a chain of benefits occurs within the relationship of farmers, government, universities, communities, and society that plays a role to significantly foster the bond of collaboration and added values [2].


The use of AHP shows that the Fruters Model, consisting of value propositions, customer segments, channels, customer relationships, revenue streams, key resources, key activities, key partners, and cost structures [3], have the following results:

Fig. 3 shows that the most influential value propositions in Yourgood are (1) the story of the business process (brand story) with a score of 0.304 out of 1, meaning that the business process story is the most influential variable on the fulfillment of desire or the needs of the customer segment served, so they are interested to buy, (2) design (0.187), (3) innovative (0.124), (4) brands (0.105), (5) benefit (0.102), (6) price (0.084), (7) accessibility (0.051), and (8) customization (0.043).

Fig. 4 shows that the Yourgood customer segment, which is the main target, is (1) the segmented market with a score of 0.511 out of 1, meaning that this segmented market is the most influential variable to its target market, in which Yourgood customizes itself more with the customer segments’ needs who are mostly middle-class society. After that, followed by (2) niche markets (0.202), (3) mass market (0.154), (4) diversified (0.078), and (5) multi-sided platforms (0.054).

Fig. 5 shows that the most influential distribution channels in Yourgood are (1) distributors with a score of 0.408 out of 1, meaning that this distributor is the most influential variable to reach customer segments and provide value propositions for Yourgood. After that, followed by (2) online sales (0.239), (3) word of mouth (0.226), (4) transportation partners (0.074), and (5) retail sales (0.053).

Fig. 6 shows that the most influential customer relationships in Yourgood are (1) personal assistance with the score of 0.294 out of 1, meaning that personal assistance is the most influential variable in terms of maintaining a good relationship with each of the customer's segments of Yourgood. This personal assistance is based on Yourgood interactions with its customers, communication during the sales process or after the purchase is complete resulting in customer loyalty, (2) special personal assistance (0.203), (3) rewards (0.179), (4) automatic services (0.122), (5) communities (0.103), (4) co-creation (0.052), and (5) convenience store (0.046).

Fig. 7 shows that the most influential revenue streams in Yourgood are (1) the selling of assets with a score of 0.220 out of 1, meaning that the sale of these assets is the most
influential variable on the Yourgood source and income stream. Revenue streams were derived from effective value propositions that can be accepted and enjoyed by user segments. Revenue streams were what will be used to finance the cost structures, the cost must reduce revenue to generate income, (2) subscription fee (0.202), (3) investors (0.155), (4) paper (0.106), (5) training (0.088), (5) intangible benefit (0.084), (6) leasing/renting (0.054), (7) savings (0.032), (4) advertising (0.031), and (10) license (0.027).

Fig. 7 Yourgood Revenue Streams

Fig. 8 Yourgood Key Resources

Fig. 8 shows that the most influential key resources in Yourgood are (1) man (human resources) and (2) material (fresh cow's milk) with a score of 0.291 out of 1. This means that man (source human power) and the material attribute of the key resource (fresh cow's milk) are the most influential variables on the functioning of its business model. Investing in human resources is the most important aspect in the progress and development of its business processes. In addition, the material that became the main raw material in the form of cow's milk availability affects business continuity. After that, followed by (3) method (0.276), (4) money (0.088), and (5) machine (0.055).

Fig. 9 Yourgood Key Activities

Fig. 9 shows that the most influential key activities in Yourgood are (1) production with the score of 0.377 from 1, meaning that this production is the most influential variable on the sustainability and the way of business. Key activities were needed to create and deliver value propositions, reach out to the market (channel), and maintain customer relationships so as to generate revenue streams, (2) distribution (0.215), (3) marketing (0.135), (4) networking (0.122), (5) assistance/mentoring (0.057), (6) training (0.055), and (7) replication (0.039).

Fig. 10 Yourgood Key Partners

Fig. 10 shows the key partners indicate that the development of its business process is heavily influenced by (1) the supplier farmers weighting 0.297 out of 1, meaning that the supplier farmers are the most influential variables on the sustainability of the business. After that, it was followed by (2) distributors (0.198), (3) business actors (0.109), (4) communities (0.101), (5) government (0.096), (6) entrepreneur business laboratory (0.077), (7) Universities (0.067), (8) banking (0.038), and (9) NGOs (0.030).

Fig. 11 Cost Structure Yourgood

Fig. 11 shows that the most influential cost structure in Yourgood is variable costs (1) with a score of 0.517 from 1, meaning that the cost of this variable most affect the overall structure and details of the costs required to operate the business, it offers and provides value bids to user segments. Thereafter followed by (2) fixed costs (0.238), (3) economies of scale (0.167), and (4) economic of scope (0.078).

From the AHP results above, it could also be seen that the sustainability of Yourgood as a social business (Sustaining Yourgood Social Business) was seen from the collaboration between stakeholder such as the collaboration among academics, business people, communities, government,
farmers, banks, and NGOs. The existence of the role of each stakeholder in the development of the business processes increased the bonds of collaboration and added value significantly. The most influential role of the Yourgood business process is community. This is in accordance with the Eigen value of the above measurement used in the AHP.

D. The Process of Empowering Yourgood Social Business

The Yourgood social business model was run over five months. The results show that to get a continuous model of empowerment, Yourgood uses a flow of process, as shown in Fig. 12 below:

**Flow of Process of Empowering Yourgood Social Business**

![Flow Diagram](image)

**Fig. 12 Flow of Process of Empowering Yourgood Social Business**

1. **Yourgood Social Business Development Phase**

1) **Discovery.** Discover a social object/ community which can be developed in rural or urban areas;

2) **In-depth Observation.** By using Design Thinking, seek for hidden patterns occurring in the community and do it for more than two weeks by living in the community;

3) **Ideation.** Social-business model ideas formulated from the results of Design Thinking observations which involved various parties with different backgrounds;

4) **Focus.** Focus only on one issue, and in this case that was the social issues to be resolved. For example, we focused on addressing the cheapest source of raw material, which is milk from the farmer, while at the same time, we want to boost the net income and welfare the farmers. So, the aim is to develop a strategy to enhance the price such as adding value for that product.

5) **Prototyping.** Prototyping created by generating the process through customer journey and empathy mapping, in-depth interviews, focus group discussions, and R&D (trial and error) to prescribe and generate the formula and create a premium product using value creation;

6) **Iteration.** Iterate the ideation process. Find the exact benefit/ social values in giving broader impact to the society;

7) **Collaboration Axis.** Formed a youth team as the Collaboration axis, in which members have a Higher Education educational background to be the promoter of the social-business activities;

8) **Join the Creative Community.** To ensure it has the entrepreneurial ecosystem to sustainably;

9) **Develop Marketing Model.** Start with the market validation by showing the prototype to buyers;

10) **Research and Evaluation.** Research and evaluation are performed periodically until the market can accept products according to the target market;

11) "Fair Trade". Profit-generating is not only used for business development, it is also used in advancing the process and ensuring its sustainability;

12) **Mixed Process Branding.** Combining social and conventional media by using resources & network which owned within communities and building a good process in partnership to have resources exchange;

13) **Resources Sharing Platform.** The fulfillment of capital resources among community members are facilitated by resources exchange/ sharing;

14) **Fulfillments of Legality Aspects.** The legality aspects gradually fulfilled based on the development target.

"Fair Trade" Profit-generating is not only used for business development, it is also used in advancing the process and ensuring its sustainability;
are gradually fulfilled based on the development target;

15) **Creating a Company Profile of SMEs.** Profiles created by writing the vision, mission, milestones, and product descriptions that contain social value (people empowerment), value propositions products, a brief description of the track record of products, the product variant, key partnerships and contact person even better there is the timeline inclusion;

16) **Investing in Human Resource.** Investing in human resource development and business networking, followed by capital goods in an effort to accelerate the business;

17) **Measuring the Success Indicators.** Measuring the success indicators such as numbers of progress, the ability of continuous improvement; technology mastery, capital generating, knowledge acquisition, improvement of social impact, investment gaining, collaboration strengthening, and sustainability of constant effort and were able to replicate the process;

18) **Continuous Iteration & Evaluation of its Business Model.** This step is very important because the business continually learns from its customers. In other words, iteration and evaluation for improvement find the best business model.

**IV. CONCLUSION**

Popon’s collaborative model was replicated on this business [4]; having a pattern that could be used as a lesson learned to improve the business skills that support the increasing independence that leads to sustainability and business progress. This collaborative model proved that the exchange of resources with various key partners could accelerate business progress, increase value, and ensure its sustainability.

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