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Design of standard operating procedure production proses (case study on the home industry Bedugul Baturiti Tabanan Bali)

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Abstract: Candikuning is part of the district of Baturiti, tourism village, better known by the name of Bedugul. No less interesting is the variety of chips produced by two partner groups as a souvenir after the tour, such as Chips: Spinach; beans; Tempeh. The purpose of this research were to design a Standard Operating Procedure (SOP): Production Processes on the Home Industry Bedugul Baturiti Tabanan Bali. The data technic collected use: observation; Documentation; and then interview to collect information. The data analysis technic done by using the Miles & Huberman. Result this research that the draft SOP: Production Processes Chips (Menu). The conclusion in this research SOP Production Processes use with flowchart and description on the Home Industry Bedugul Baturiti Tabanan Bali.

1. Introduction

Chips are a popular snack. Products and innovations must co-exist for the growth and development of the products. Products can be defined as something that can be offered to the market to gain attention, acquisition, use, or consumption that can satisfy the user's wants or needs [1]. Innovation is divided into several major categories: product, process, position and organizational innovation [2]. There are many definitions of innovation, for us it is interesting Schumpeter's division of innovation which is divided into: production, which include the introduction of new products, the process, which include the introduction of new methods of production, the market, which include the opening of new markets, entry, covering the conquest of new sources of raw material, organizational, which include the introduction of new organizational solutions [3]. Successful home industry can meet changing consumer needs by adopting new products, services and unique marketing mix [4].

The production management adopted is still traditional, because it still uses earthenware bowl. Packaging uses plastic, with insufficient thickness, and is ealed using a stapler, so the chips are easy to become mushy, because there is air coming through the plastic hole. Marketing is still around Candikuning market, in addition to street stalls toward Candikuning. One of the groups market their chips through the vegetable sellers who sell to Denpasar everyday. Standard Operating Procedure (SOP) is a reference in doing a job which can be shown through a flowchart. Flowchart is a diagram in the form of symbols and can show the flow of data and operations that occur in a system [5].



Household Industry Group is headed by hajjah Farida and Raba'yah. They do not have SOP of production process (menu) of chips, so they face constraints in controlling the launching of new products, with product innovation and taste innovation. The SOP allows all family members to complete a certain work process. Both groups do not have SOP of the production process (menu) chips, this is because the equipment used is still far from the reach of technology and the skills used are still simple in doing business process. The scope of this research is as follows production. The most basic problem that needs to be addressed: SOP design; the production process (menu) of chips.

2. Research Methods

This research was conducted on Household Industry Group (Home Industry Club) Bedugul Baturiti Tabanan Bali. It was a case study. The data technic collected use: observation; Documentation; and then interview to collect information. The sampling technique was purposive sampling. Total of sample were 6 workers with the division of the workers was as follows: 2 workers as Production head, 2 workers as General affairs, and 2 workers as Marketing. The data analysis technic done by using the Miles & Huberman [6]. This analysis technic can be seen in the figure 1.

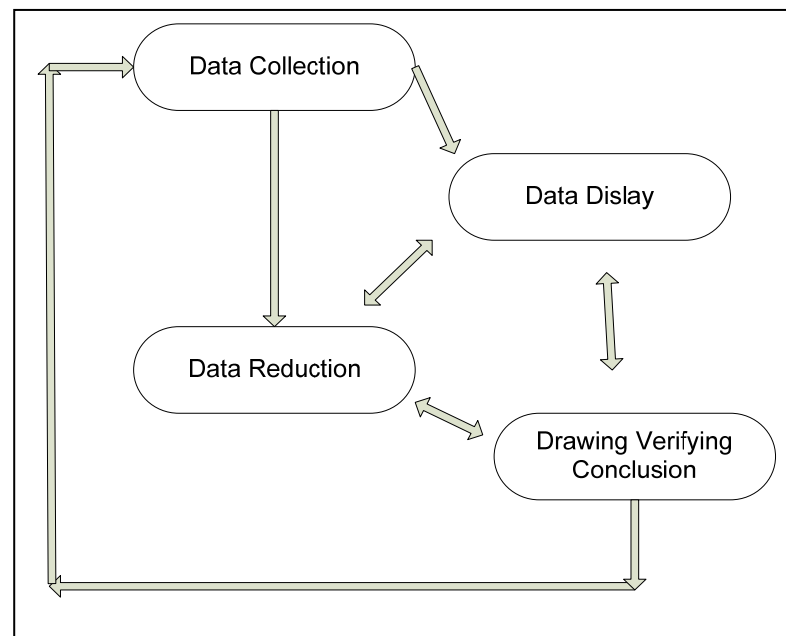


Figure 1. Data analysis technique Miles & Huberman

Activities in the analysis include data reduction, data presentation and conclusion drawing/verification. The data used in this study were primary data, that is the data obtained directly through observations and interviews such as raw materials used for the production process. While secondary data included data about the division of responsibilities in doing the work.

To make design a Standard Operating Procedure (SOP): Production Processes on the Home Industry Bedugul Baturiti Tabanan Bali can be shown in the following figure.

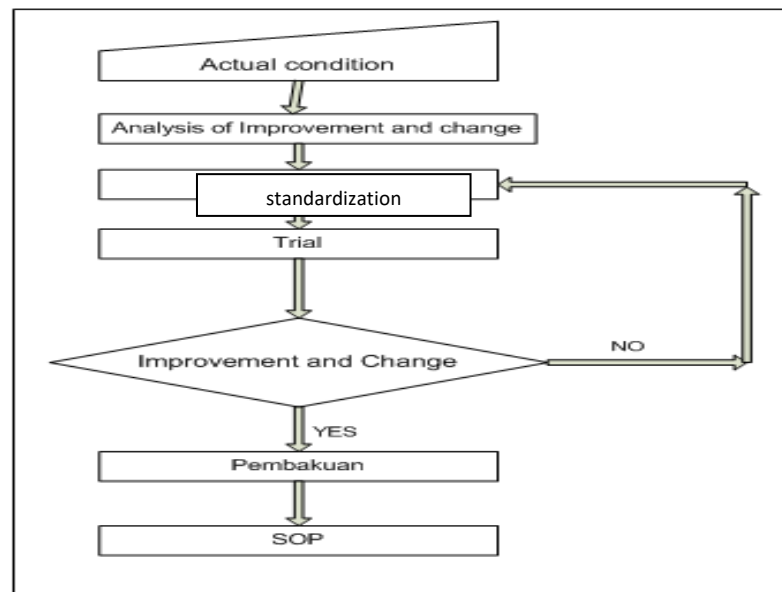


Figure 2. flowchart to make SOP

3. Research Result and Discussion

3.1 Sample Charateristic and busines process

This research used informant Hajjah farida and Raba'yah as sample, besides other families as the object studied, which can be seen from tables 1 and 2 below:

Table 1. Sample from IRT Group 1

Name	Position
Hajjah Farida	Production head
Haji Murtadah	General affairs
Mujib	Marketing

Table 2. Samples from IRT Group 2

Name	Position
Raba'yah	Production head
Bapak Nur	General affairs
Samsul	Marketing

Business processes have the following type: 1. The management process is a process that controls the operational activities. 2. The operational process is a process that has a core business, for example: the process of purchasing, manufacturing, advertising, and marketing and sales. 3. Supporting processes, which support the core processes, such as recruitment, accounting, and permissions.

3.2 Product Innovation and Implementation of the use of tools in the production process

To make the product preferred by customers especially snacks, it needs a good innovation. this innovation is developed with the application of appropriate technology. The Innovation done included product packaging, labeling, choosing flavor, and choosing method of promotion.

The tools used in the production process includes a blender to smooth spice, with a blender can produce twice as much. Hand Seler a plastic cover, is used after the chips inserted into 5 mili thick plastic that has been screened and contains a label, brand, P-IRT and halal certificates. Other machines such as mowers yams using a motor, can cut the potatoes in large quantities. The machining parameter

are chosen to satisfy various economic objectives. These objectives can maximize production, minimize cost, and maximize surface finish [7].

The ordering quantity for each product and the desirable number of each product type in a vending machine must be simultaneously decided to maximize the total expected profit. So also with the engine oil drainer can drain tempeh. Tempe has become a daily diet of Indonesian people for hundreds of years and even it has also become an exotic food recognised globally. Beside its excellent nutrition quality, tempe has also known as a source of bioactive compound such as antioxidant. The outstanding characteristic of tempe has made tempe becoming more popular not limited to vegetarians [8]. Spinach is low in calories, containing in its raw form around 14 calories per cup. Even more important, it has a significant amount of chlorophyll, a substance that may protect against cancer. Research in laboratories has proven that the chlorophyll in spinach lowers the activity of cancer causing agents [9].

The beneficial effects of unsaturated fats are now well documented. Epidemiological studies have confirmed that consuming nuts, a snack food, at least five times per week may contribute to protecting against cardiovascular disease (CVD), type two diabetes and more recently gallbladder disease [10]. Nuts do not appear to have a detrimental effect on glucose homeostasis and hence may offer protection against insulin resistance. Several intervention studies in normal, hyperlipidaemic and diabetic subjects have demonstrated the cholesterol-lowering effects of groundnuts (legume peanuts) and tree nuts, when consumed regularly at a level of 1oz or more [11].

When using the Consignment system, partners are sending products within a month, and if the payment time has arrived, partner is entitled to charge to the customer (customer). Partners also need to know the system of payment will be made, when buying products with Cash. Cash is the oldest and it remains the dominant payment instrument despite the development of e-payments. Even in countries with several dozen years of experience in card use, cash still remains the main form of payment. Cash was used in 70-93% of the total of retail transactions concluded by households in the most important western economies in 2005 [10]. The Polish market is also dominated by cash payments. The results of the survey study show that as much as 94.5% of all payments performed by retail customers at POS were made with cash, only 3.8% with debit cards and 1.7% with credit cards [11]. Innovation and the use of appropriate technology can be a material to make standard operating procedures (SOP) on the business chips that become a household industry in Bedugul Bali

3.3 Standard Operating Procedure (SOP) Chips Production Process (Menu)

The SOP design of the chips production process (menu) was made because of the many customers who wanted chips products such as: spinach chips, tempeh and nut chips, so the two IRT groups always produced new products saying that the industrialization process is an investment of equipment, facilities and technology with the aim of maximizing production output, improving quality and minimizing labor resources [12]. The design of the new production process (menu) through observation and interviews can be shown in the following figure 3.

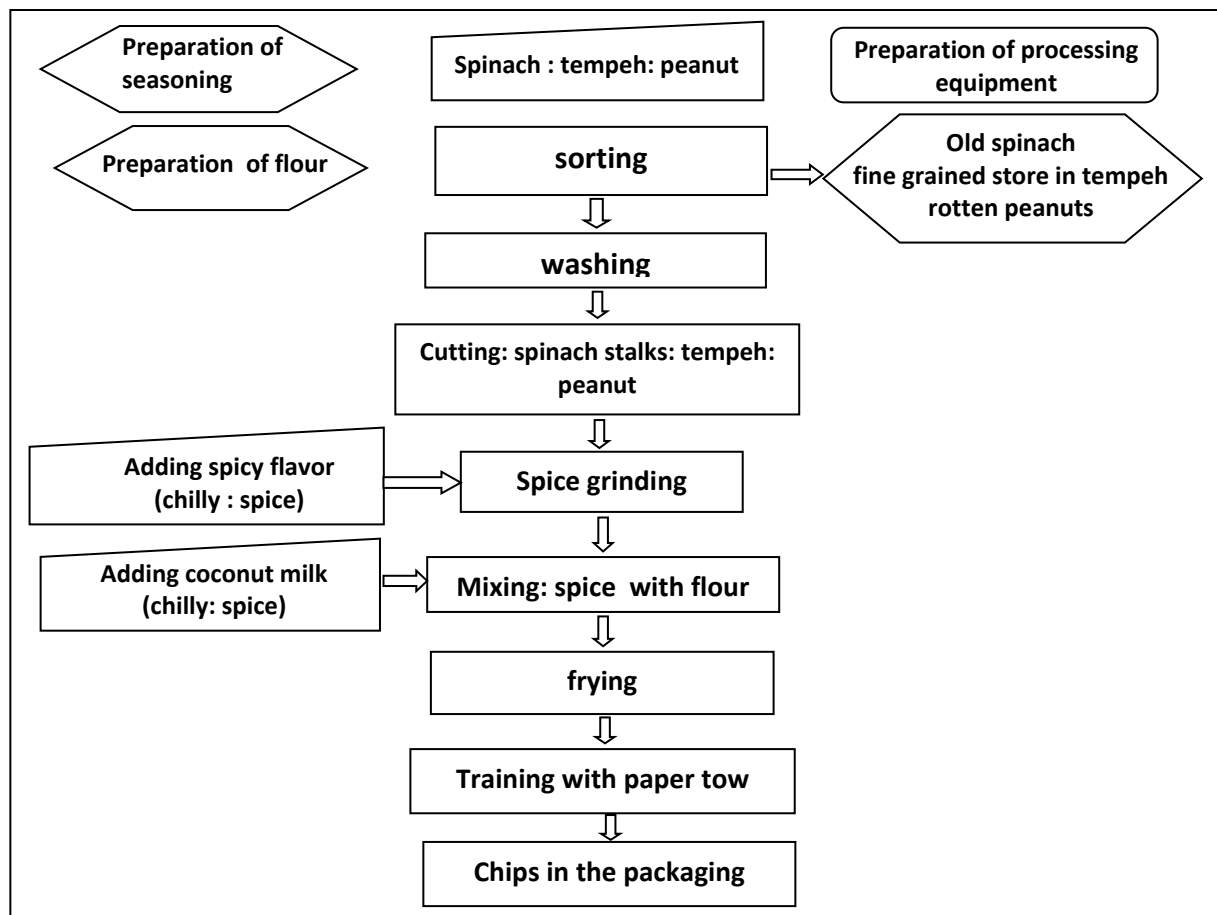


Figure 3 Production Process SOP (Menu)

As shown in Figure 3, activities carried out in the production process are important activities that need to be considered, for example sorting spinach often occurred in the absence of spinning, so old spinach still needs to be sorted again, so that the chips become crunchy with young leaves. It also applied to tempeh chips; there is the possibility of the discovery of pebbles, given the tempeh obtained from market. Finally, peanut used to make nut chips need to be sorted, because the good quality of peanuts produces good chips as well.

4. Conclusion

Conclusion of this research: SOP: Chips production process (Menu) is structured by using flowchart and information on Household Industry Bedugul Baturiti Tabanan Bali.

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