

## LEARNING MODEL OF FOOD PRODUCT ENTREPRENEURSHIP COURSE IN FOOD TECHNOLOGY PROGRAM

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### Abstract

Technology Study Program, Universitas Terbuka provides food product entrepreneurship courses to support one of the learning outcomes of food graduates who have entrepreneurial abilities. In this course, students are expected to be able to develop food business ideas, practice to developed food-based products that are commercially viable, and arrange business feasibility proposals. The learning model for food product entrepreneurship courses uses online practice through [elearning.ut.ac.id](http://elearning.ut.ac.id) which is held for 2 months. There are 8 sessions in this online practice where in each session consists of initiation material, enrichment material, discussion with tutors, independent practice, quizzes, and 2 assignments for the 5th and 7th sessions. In first, students determine the food product business idea and practice of developing commercially viable food products. In the second task, students will make a business feasibility study proposal. In this assignment, activity business of student documented in the video. To obtain input related to the learning process, a survey was conducted using a questionnaire for all tutors. As many as 61.5% of tutors assessed that the material on e-learning, the learning process, discussion questions, and assignments was good. Total 69.2% Interaction between tutors and students is good. All tutors stated that there was a need for online guidance in the learning process with a frequency of 2-4 times. As many as 62% of tutors stated that there were at least 3 assignments in this course. The materials that need to be added in this course are the food product certification process (halal PIRT), business negotiation techniques, and business analysis.

Keywords: business, entrepreneurship, food, model, tutorial online.

### 1 INTRODUCTION

Entrepreneurship is a form of community creativity in dealing with day-to-day challenges. Entrepreneurship is a chance to combine innovation, opportunity, and knowledge application in business (Sutanto, 2020). There are several factors to consider when starting a business in the food industry, including quality, regulation, and marketing. Some foods and food products are perishable or perishable. Food is made of organic materials that can be harmed by physical, chemical, and biological factors (Kumar et al., 2017). Treatment is required during processing to extend the shelf life of the food product. Various techniques, including temperature, physical, and chemical treatments, can be used to extend the shelf life of a product. Quality includes visual aspects in addition to shelf life. product flavor and benefits (European Commission, 2022). To make a profit in business, the food products sold must correspond to the tastes and price ranges

desired by consumers. Entrepreneurs may encounter difficulty in marketing their products. The key to a successful product is effective marketing..

A good product can fail due to ineffective marketing. One of the contributing factors is a lack of knowledge about how to properly 'market' the product. If a good product is not accompanied by appealing and persuasive 'advertising,' it will be difficult to attract buyers, causing obstacles in selling the product, resulting in a loss (Ryynänen & Hakatie, 2014). Advertising skills must be learned, especially in trades that focus on the virtual/digital world. Aesthetic food product photography techniques and digital marketing techniques can be learned. Regulation is another impediment to successful food entrepreneurs. A food product that will be circulated in Indonesia must follow the food regulations that have been made by the relevant authorities such as the Food and Drug Administration (BPOM, 2022). Many cases of food withdrawals by BPOM are due to the fact that many producers do not understand how legal distribution permits are for food products in Indonesia. Knowledge of how to trade food products in accordance with applicable regulations in Indonesia needs to be known.

One of the missions of the Food Technology Study Program (TP), Department of Agriculture, Faculty of Science and Technology, Open University (UT) is to disseminate the results of the study of food science and technology in educating the community. TP UT students have been equipped with the knowledge and skills to deal with the food industry in general. Entrepreneurship programs are also implemented in the curriculum to spur the entrepreneurial spirit of TP UT students. However, in practice and when applied in practice, specific constraints often arise when the student is involved in the industry. The Food Technology Study Program designed a course called Food Product Entrepreneurship (PANG4417) which focuses on food-based business development competencies. Business in the food sector has great potential, since ancient times until the end of time there will always be. Compared to other types of businesses that exist and then disappear due to changing times, the food-based industry continues to grow rapidly. The food industry in the last 10 years has continued to increase, various types of food are widely circulated and sold in the community and exceed human expectations in previous times. In addition, the position of the food industry such as food and beverage has long been recognized as a very important business sector in Indonesia. The various roles of the real food and beverage industry in the economy. Starting from the share in the formation of GDP, the ability to absorb labour and a significant share in the total export value. Besides, the existence of the food and beverage industry itself is one of the alternative efforts to overcome poverty in Indonesia. Like

other industries in Indonesia, the food and beverage industry consists of large, medium and small industries. The number of small and micro industries is relatively large. The growth of the food and beverage industry reached 9.23% in 2017, 7.91% in 2018, 8% in 2019 and 3%-4% in 2020 (Vidyatmoko, 2020)

Food product entrepreneurship courses are structured so that students can practice food product entrepreneurship. This 4-credit course discusses the entrepreneurial aspects of food products from the technical, technological, production, regulatory, human resources, marketing, financial aspects to the preparation of business feasibility proposals. In this course, students will practice commercial food product entrepreneurship, starting from exploring business ideas, determining target markets, designing food products, and marketing products, and at the end of this course, students will be asked to make a business feasibility presentation. The research aims to describe the implementation of the entrepreneurship practicum that has been carried out by the food technology study program and the feedback provided by the tutor in charge of this course.

## **2 METHODOLOGY**

This research was conducted with a descriptive analysis of the implementation of entrepreneurial practices that have been carried out so far. Then to find out feedback related to learning, it is done by giving questionnaires to all tutors.

## **3 FINDINGS AND DISCUSSION**

### **3.1 Learning model food product entrepreneurship course**

The Food Product Entrepreneurship Practice (PANG4417) is structured so that students can carry out entrepreneurial activities in the food sector, starting from making food products to be sold, making business feasibility proposals, to implementing business activities. In this practice, it begins with exploring the potential and character of an entrepreneur in students. Students can learn the characters needed to become an entrepreneur. Continued with the process of exploring food-based business ideas. Here, students can express their business ideas in the form of a business model canvas. Students are also directed to start making food products to market trials. Students are also given knowledge about the aspects that need to be prepared to set up a business, starting from aspects of production, marketing, human resources, and finance as well as risk management. At the last stage, students can prepare business feasibility proposals, make food product businesses, arrange communication and negotiations in selling food products. The Food

Product Entrepreneurship course is designed with a practical approach so that it is not only theoretical but emphasizes the activities of making products and selling them systematically. The practice begins with a discussion of business idea design, implementation and evaluation of the business to the preparation of a business feasibility proposal addressed to potential investors. The learning of food product entrepreneurship courses is carried out through online practice or abbreviated as praton. with the following conditions: Praton is held in 8 sessions. There are 2 tasks in the 5th and 7th sessions. The total value comes from praton assignments where the weight value of Task 1 is 40% and Task 2 is 60%. The stages of the ongoing learning process will begin with the provision of the main material, then proceed with a discussion in the discussion forum, and close with independent practice at the end of the session stage.

### 3.2 Material

The materials given for this course at each meeting are:

- Introduction to Entrepreneurship
- 2nd Week Meeting: Food-Based Business Development
- 3rd Week Meeting: Strategy and Business Planning
- 4th Week Meeting: Production Planning
- 5th Week Meeting: Financial Planning
- Week 6 Meeting: Marketing and Sales Planning
- 7th Week Meeting: Business Feasibility Proposal Preparation
- Week 8 Meeting: Communication and Business Negotiations

The formulation of achievements in the learning process and the scope of the material provided from sessions 1-8 are described in table 1.

*Table 1. Formulation of learning outcomes and material coverage*

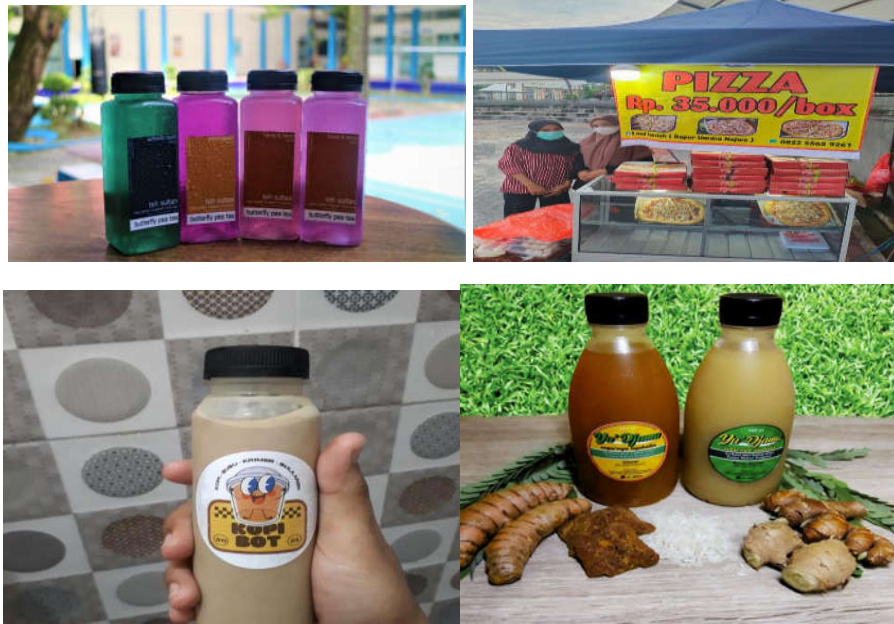
No	Learning outcome	Material
1.	Able to explain the concept of food product entrepreneurship and explain the success of business ventures	Learn the definition and concept of entrepreneurship, self-potential analysis and entrepreneurial character
2.	Able to develop potential ideas and design business stages for the food business that will be developed.	explain the design of food business development, determine potential food business ideas to be developed, and be able to explain the components of product attributes

3.	Able to explain strategic management and formulate strategies in the food business	Learn about strategic management, types of business planning, identification of the internal and external business environment in business, and formulating strategies in the food business. Then formulate strategy, implement strategy, evaluate strategy
4.	Able to plan production materials, production equipment needs and production processes.	Learn about the planning of production materials, production equipment and production processes as well as the functions and objectives of production planning, determining production locations, formulating production costs, planning production processes and controlling production
5	Able to explain the functions of financial management, budget planning in the food business and financing in the food business	Learn about the functions of financial management, budget planning in the food business and financing in the food business, making financial reports, preparing financial budgets and investing in the food business
6	Able to apply marketing strategies in the food business	Learn about the marketing function in the food business, the application of the marketing mix in the food business, the food industry market, marketing strategies and food product marketing research
7	Able to make business feasibility proposal	Learn about the function of a business feasibility proposal and the components in a business feasibility proposal as well as financial and non-financial aspects
8	Able to apply business communication, and negotiation in the food business	Learn about the form and function of business communication, business communication processes and negotiations in the food business

There are 2 tasks that must be done by students, namely task 1, practical task, 2 pieces consisting of: Task 1 in the form of a report on the manufacture of food products and Task 2 in the form of a business feasibility proposal. Some important discussion points in the assignment are described in table 2. There are 2 tasks that must be done by students, namely task 1, practical task, 2 pieces consisting of: Task 1 in the form of a report on the manufacture of food products and Task 2 in the form of a business feasibility proposal. Some important discussion points in the assignment

are described in table 2. In this course, various potential food products have been produced (Figure 1).

No	Assignment	Material
1	Task 1	<ul style="list-style-type: none"> <li>• Describe commercial food business opportunities</li> <li>• Selection of business ideas by weight</li> <li>• Outlining the developed business idea</li> <li>• Develop product attributes</li> <li>• Describe the stages of the business being carried out</li> <li>• Describe the stages of the production process</li> <li>• Describe the need for raw materials, auxiliary materials, and packaging used</li> <li>• Documenting the food products made</li> <li>• Describe market trials</li> <li>• Describe the obstacles faced</li> </ul>
2	Task 2	<p>Prepare a business feasibility proposal by taking into account several aspects</p> <ul style="list-style-type: none"> <li>• Product, Technological engineering, environment, competition, industry, business model, strategy, Marketing and Sales Strategy, Production/Operations, Management and HR, Intellectual Property, Regulatory/Environmental Issues, Risk Factors, Timing Considerations, Financial Projections, Capital Strategy, Documentation Final Recommendation</li> </ul>



*Figure 1. Food entrepreneurship products that have been developed*

Based on the questionnaire distributed to all tutors, it was stated that As many as 61.5% of tutors assessed that the material on e-learning, the learning process, discussion questions, and assignments was good. Total 69.2% Interaction between tutors and students is good. All tutors stated that there was a need for online guidance in the learning process with a frequency of 2-4 times. As many as 62% of tutors stated that there were at least 3 assignments in this course. The materials that need to be added in this course are the food product certification process (halal PIRT), business negotiation techniques, and business analysis. Some of the tutor's inputs are that there should be 3 assignments, There is a gap during the discussion because not all students have discussions, Attendance, discussions may be given a value so that they are intense and creative, Webinar sessions need to be reactivated for student enrichment

#### **4 CONCLUSION**

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