


## Elements of Innovation Diffusion in the use of Hau Fo in Making Tea Bags

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### ABSTRACT

The purpose of this study was to determine the diffusion of innovations involving the use of hau fo in tea bag production. This study used a qualitative approach with a descriptive approach. This research was conducted at the Dapur Kelor Office of RSS Oesapa, Kupang City, East Nusa Tenggara. Six informants participated in this study. Data collection was conducted using three methods: observation, interviews, and documentation. The results indicate that the innovation carried out by Dapur Kelor aims to introduce the public to the fact that the moringa plant can be consumed in other processed forms, such as moringa tea bags, which have good nutrition for the body. This innovation was also carried out to improve the economy of moringa farmers and raise the economic standards of MSMEs. The marketing of the moringa tea bag innovation uses an application to sell processed products from Dapur Kelor in the Dapur Kelor Id store on Tokopedia, through Instagram, and directly to consumers. The decision-making process for the moringa tea bag innovation is considered successful because it has increased from year to year. Dapur Kelor itself employs SPGs (Sales Promotion Girls) and also collaborates with the Regional Government.

**Keywords:** *Diffusion of Innovation, Tea Bags, Moringa Leaves*

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## INTRODUCTION

Indonesia boasts thousands of species of herbal plants, each uniquely distinguishing one region from another, spread throughout the country. One commonly encountered plant is the *Moringa oleifera* (moringa). This plant originates from India, but has been found in many other countries. In Indonesia, the Moringa plant is widespread in various regions and is known by various names, including kelor (Java, Sunda, Bali, Lampung), moronggi (Madura), moltong (Flores), keloro (Bugis), ongge (Bima), and hau fo (Timor) (Amina, Ramdhan, and Yanis, 2015).

Moringa, or *Moringa Oleifera* Lamk in Latin, is popularly known as "The Tree of Life." Moringa plants can grow quite long and reach heights of 7 to 12 meters. This tree has a woody stem, compound, ovate leaves, a taproot, creamy white flowers, elongated, triangular fruit, and round, brownish seeds (Astuty, 2019). This plant grows in both lowlands and highlands, regardless of the season.

The Moringa plant is rich in nutrients and is often called the "Miracle Tree" because all parts of the plant are beneficial to life. Nutrients are found in all parts of the Moringa plant, from the leaves and bark, seeds, fruit (pods), and roots, which are widely known as medicinal plants (Jusnita and Syurya, 2019).

The nutritional content of the Moringa plant is extraordinary. A study by a US-based organization found that per gram of dried moringa leaves contains 10 times more vitamin A than carrots, 17 times more calcium than milk, 25 times more iron than spinach, 9 times more protein than yogurt, and 15 times more potassium than bananas (Thurber and Fahey, 2009).

Furthermore, moringa leaves have the potential to be used as a health-promoting probiotic drink or as a fortifier in food to enhance its nutritional value. The fruit and seeds of the moringa plant can be processed into flour or oil, which can be used as raw materials for high-value medicines and cosmetics, and moringa leaf powder can be added to various foods as a nutritional supplement (Purwati, 2019).

The widespread use of the moringa plant, known for its high-quality nutritional value, has led to public awareness of the need for instant innovations with high market value. One such innovation is moringa tea. According to Aini (in Rahmawati, 2015), tea leaves contain caffeine, a compound known to have a refreshing effect on the body. Moringa tea is rich in vitamins such as vitamin C and B, especially thiamin and riboflavin, which can help the body absorb protein and are believed to relieve headaches. Furthermore, the polyphenol compounds in moringa tea function as antioxidants, slowing and preventing oxidation by free radicals, thus preventing cell damage and helping prevent chronic diseases such as cancer.

This is relevant to previous research conducted by Nikita (2018) on "Haice moringa (health of ice cream), an innovative product processed from moringa leaves as a promising business prospect for students." It was found that the ice cream was processed into a food with a new innovation, making it acceptable to all levels of society, with guaranteed price and quality.

Moringa is widely grown in East Nusa Tenggara (NTT) Province, especially in Kupang City. However, its utilization remains very limited. Some people only use it as a complement to their daily menus and prepare it as a clear vegetable soup. Due to the limited processing of moringa leaves, innovation has emerged to create products based on moringa leaves.

Dapur Kelor is a Small and Medium Enterprise (SME) in Kupang City specializing in moringa cultivation, from garden management and production to marketing. Dapur Kelor has obtained legal and business registration, including a Trade Business License (SIUP), a Business Premises License (SITU), and a Company Registration Certificate (TDP). Several of Dapur Kelor's products have passed food safety tests from the Food and Drug Monitoring Agency (BPOM) and received Home Industry Product (PIRT) certification from the Kupang City Health Office. Dapur Kelor's flagship products include tea bags and brewed tea, moringa coffee, and moringa chocolate. Other products produced include 200-mesh Moringa Leaf Powder, Moringa Leaf Capsules, Moringa Soap, and Moringa Masks. Meanwhile, Dapur Kelor also produces food products in the form of Moringa Stick Snacks, processed by women in Tilong. These women are under the guidance of Dapur Kelor. Dapur Kelor has a moringa garden and dries the leaves using a drying house produced by PT. MOI, which can reduce water content to 5%, humidity to 30%, and a stable temperature of 35°C for three days. Dapur Kelor also has a cafe and gallery in Penfui, close to the student community. The cafe and gallery will serve youth-style menus featuring moringa products. This is intended to familiarize young people with moringa products.

Based on preliminary research conducted by researchers on June 9, 2020, data was obtained that the production location for processed moringa leaves is located at Dapur Kelor Office, located at RSS Oesapa, Block Q No. 17, Oesapa, Klp. Lima, Kupang City, East Nusa Tenggara. Dapur Kelor also employs workers to make moringa products. Dapur Kelor provides a variety of moringa leaf-based products, such as tea bags and brewed tea, moringa coffee, capsules, chocolate, masks, and moringa stick snacks. Moringa tea bags are a popular product among the people of Kupang City due to their rich nutritional content. Based on the explanation above, the author is interested in conducting this research on "Elements of Innovation Diffusion in the Use of Hau Fo in Tea Bag Making."

## METHOD

### Type of Research

The type of research used in this study is qualitative research, with a descriptive approach. According to Satori (in Esa, 2015), this research was conducted because the researcher wanted to explore non-quantifiable phenomena that are descriptive in nature, such

as the process of a work step, the formula of a recipe, the understanding of various concepts, the characteristics of goods and services, images, styles, cultural procedures, the physical model of an artifact, and so on. Meanwhile, according to Sukmadinata (in Hid Ayah, 2017), qualitative descriptive research is research that describes and analyzes phenomena, events, social activities, attitudes, beliefs, perceptions, and thoughts, both individually and in groups. Qualitative research is research that aims to understand the problems experienced by research subjects, such as behavior, perceptions, motivations, and actions, holistically and descriptively using words and language, within a specific, natural context and utilizing various natural methods (Moleong, 2014).

Based on the statements from several experts above, it can be concluded that qualitative descriptive research is a series of activities to obtain data that is as is and natural as it is. Here, the researcher used a qualitative descriptive research method because she wanted to explore the elements of innovation diffusion involving the use of hau fo in making tea bags.

### **Research Location**

The research location is related to the research object, where the research activities are conducted. The determination of the research location is intended to simplify and clarify the research object. The location of this research is the Dapur Kelor Office, located at RSS Oesapa, Block Q No. 17, Oesapa, Klp Lima, Kupang City, East Nusa Tenggara.

### **Research Subjects**

A research subject is an attribute or characteristic of a person, object, or activity that has certain variables that are determined to be studied and conclusions drawn (Sugiyono, 2012). In this study, the research subjects were the CEO of Dapur Kelor (1 person), the Director (1 person), and the employees/members (4 people).

### **Data Collection Techniques**

The data collection techniques in this study used three methods: observation, interviews, and documentation.

#### *Direct Observation*

This is a data collection technique that involves careful observation and systematic recording (Sugiyono, 2012). In this observation, the researcher directly interacts with the subjects being observed to directly identify the elements of innovation diffusion involving the use of hau fo in tea bag production.

#### *Interviews*

An interview is a purposeful conversation. The conversation is conducted by two parties: the interviewer, who asks questions, and the interviewee, who provides answers (Moleong, 2014). Interviews are directed at a specific problem or the focus of the research. This is a process for gathering information directly and in-depth. In this study, the researcher prepared a research instrument in the form of a questionnaire, which is attached, and the researcher recorded the informants' responses. Therefore, the type of interview used by the researcher was an open-ended interview.

#### *Documentation*

Documentation is a method of collecting data obtained from existing documents or stored records, whether in the form of transcripts, books, or newspapers. Documentation is used to collect data that can support and supplement other data collection techniques. Data can be obtained through literature studies through documents and archived reports related to the problem at hand. Furthermore, a tool containing the aspects being studied is needed to support the validity of the data, namely photographs of the activities being studied. Photos can provide a descriptive picture of the situation at a specific time.

### **Data Analysis Techniques**

Data analysis is an ongoing process that requires continuous reflection on the data, asking analytical questions, and writing brief notes throughout the research (Sugiyono, 2012).

#### *Data Collection*

In the data collection stage, the researcher enters the research environment and collects data obtained from interviews, observations, and documentation, which are recorded in field notes consisting of two aspects: description and reflection. Descriptive notes are data that

contain what the researcher saw, felt, witnessed and experienced without any opinions or interpretations from the researcher about the phenomena encountered in the field. Meanwhile, reflective notes contain the researcher's impressions, comments, and interpretations of findings in the field and serve as material for the data collection plan for the next stage.

#### *Data Reduction*

Data reduction is defined as selection. It focuses on simplifying, abstracting, and transforming raw data emerging from written field notes. Data reduction is a form of analysis that sharpens, directs, classifies, discards unnecessary data, and organizes data in such a way that final conclusions can be drawn and verified. Methods used in data reduction can include summaries or brief descriptions, or grouping data into a broader pattern.

#### *Data Presentation*

Data reduction results are presented systematically in the field in a way that is easy to read and understand, both as a whole and its parts within the context of a whole. By viewing the data presentation, researchers can understand what is happening and what needs to be done, enabling analysis and taking further action based on this understanding.

#### *Drawing Conclusions*

This is the stage where researchers must review the collected data. Verified conclusions are a repetition of second thoughts that arise from the researcher while writing. Researchers present the data after data reduction and summarization. Data presentation is done by describing or presenting the results of interviews and observations, presented in narrative text, and supported by documents, and photographs or similar images.

## FINDINGS AND DISCUSSION

Moringa leaves are known as Hau Fo in the Timorese language. This plant is called Hau Fo because of its distinctive aroma, which is why the Timorese (Dawan) people commonly call it that. Moringa plants are familiar to the people of East Nusa Tenggara (NTT) because they are commonly processed into clear soup. Due to the limited availability of moringa leaves, Dapur Kelor has created an innovation: moringa tea bags.

Innovation can be defined as a process of human activity or thought that seeks to discover something new related to input, output, and process, and can provide benefits to human life (Makmur and Rohana, 2015). Dapur Kelor's innovation aims to introduce the public to the fact that moringa plants can be consumed in various processed forms and contain numerous nutrients that are beneficial for the body. This innovation in moringa tea bags aims to improve the economy of moringa farmers and raise the economic standards of MSMEs (Micro, Small, and Medium Enterprises) in East Nusa Tenggara.

The results of the above study align with research conducted by Waja, Dima, et al. (2021). The research findings indicate that this activity aims to educate the public on how to make delicious Moringa Leaf Sticks, a way to increase interest in MSMEs. This activity has a positive economic impact by contributing to home business ideas that can continue to thrive during the pandemic.

Research conducted by Soekopitojoama, Devi, et al. (2021) shows that the moringa noodle-making training is a means of outreach to increase public knowledge and skills about moringa leaves and to expand their use. This moringa noodle-making training also serves as an effort to empower the community as an alternative to entrepreneurship to increase their income.

To market the moringa tea bag innovation to consumers, Dapur Kelor utilizes both mass media and interpersonal communication channels. Through mass media, Dapur Kelor has an app for selling moringa leaf products, such as moringa tea bags, at the Dapur Kelor Id store on Tokopedia, and through Instagram. For interpersonal communication, Dapur Kelor sells directly to consumers.

The results of this study align with research conducted by Novini. (2021). Research results indicate that marketing/introducing products to the wider public involves leveraging existing social media platforms such as WhatsApp, Line, Facebook, and Instagram.



Research conducted by Nikita, Hasan, et al. (2018) examined Haice Moringa (Health of Ice Cream), an innovative moringa leaf product as a promising business prospect for students. The study showed that promotional and marketing strategies utilized social media (Instagram and WhatsApp), brochures, x-banners, and participation in car-free days.

Research conducted by Musfidasari, Salsabila, et al. (2015) showed that the method employed in the business was to open a direct business opportunity by marketing the product and conducting active promotions, both directly and indirectly, through social media and online.

The moringa tea bag innovation implemented by Dapur Kelor has increased year after year, as seen from increasing market demand. This is all inseparable from the stages of innovation decisions undertaken or created by Dapur Kelor.

A social system is a unit that is interconnected and engaged in problem-solving to achieve a common goal. Members or units of a social system can be individuals, groups of informants, organizations, or subsystems (Roland, 2020). According to Rogers (in Isatati, 2010), the diffusion of innovation in a social system depends on social structure, norms, opinion leaders, and change agents. Based on this understanding, Dapur Kelor employs SPGs (Sales Promotion Girls) and collaborates with the Regional Government to realize the Governor's program.

## CONCLUSIONS

Based on the research results and discussions, the following conclusions can be drawn: The moringa tea bag innovation implemented by Dapur Kelor can bring about change for moringa farmers and also improve the economic standards of MSMEs (Micro, Small, and Medium Enterprises) in NTT. The communication channels used by Dapur Kelor include mass media and interpersonal communication. Both communication channels are considered highly efficient and effective, as Dapur Kelor's mass media platform promotes its products, particularly moringa tea bags, while its interpersonal communication channel sells directly to consumers. The increased timeframe for Dapur Kelor indicates that the innovation's decision-making process is well-accepted by the community. A social system is defined as a collection of functionally distinct units bound together by cooperation to solve problems in order to achieve goals. Social systems consist of individuals, informal groups, and organizations. Within a social system, there are social structures, norms, opinion leaders, and change agents. Within the social system at Dapur Kelor, they employ SPGs (Sales Promotion Girls) and also collaborate with the Regional Government to implement the Governor's program.

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