

Eco-Innovation for Sustainability in Traditional Herbal (Jamu) Agroindustry: OGSM-Gap Analysis Based on Employee Perception

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Abstract

This research is motivated by the importance of eco-innovation in traditional herbal medicine agroindustry by using local ethnobotanical raw materials to support sustainability and answer increasingly stringent market demands. This research aims to identify gaps between objectives, goals, strategies, and performance measurements related to eco-innovation in the traditional herbal medicine agroindustry based on employee perceptions. The data analysis method used is the OGSM-Gaps model, which collects data through questionnaires distributed to traditional herbal medicine agroindustry employees at the research location, namely Solo Raya. The research population was employees of the traditional herbal medicine agroindustry. This research uses a basic case study method. The research sample was taken using a simple random sampling method of 100 respondents. The research results highlight the need for improvement in several aspects of the organization. First, organizations need to focus on providing education and training for salespeople or store staff so that they can provide accurate information about traditional herbal medicine products. Second, increasing the promotion and branding of traditional herbal medicine products is needed to broaden public understanding. Furthermore, increasing the competitiveness of traditional herbal medicine products in the market is a priority, with an emphasis on market research and product innovation. Finally, operational efficiency needs to be improved through operational audits, adopting more efficient technology, and the involvement of employees in these improvement efforts. These improvement efforts will support the organization in achieving sustainability goals and sustainable business growth.

Keywords: agroindustry, eco-innovation, gap analysis, OGSM analysis, sustainability

1. INTRODUCTION

The production of traditional herbal medicine by agroindustry in the Solo Raya area faces serious problems threatening its sustainability. The POM Agency recorded only 62 standard herbal medicines and 24 phytopharmacies in Indonesia, which is still far from the great potential of herbal research results in this country (Herma, 2020). First, the lack of innovation in developing traditional herbal medicine products makes it difficult for this industry to compete with modern products. Second, the lack of standardization in production creates product quality and safety uncertainty. Third, the lack of competitiveness makes it difficult for traditional herbal medicine producers to market their products widely, especially in the face of competition from pharmaceutical products. Fourth, the lack of knowledge and empowerment for business actors in this sector limits the potential for developing the traditional herbal medicine industry. Fifth, lacking adequate and targeted marketing hinders more comprehensive market access. Lastly, the minimal use of eco-friendly raw materials is an obstacle to efforts to maintain the sustainability of the surrounding environment, which is essential in a sustainable context.

The sustainability problem of traditional herbal medicine production, especially in Solo Raya, is related to the lack of eco-friendly raw materials, which can harm the surrounding environment and damage the business reputation. In this context, according to research by Barbieri and Santos in 2020, the technical aspect states that there needs to be eco-innovation in production that prioritizes

environmental sustainability by using raw materials that are more friendly to nature (Najib et al., 2022). From an economic aspect, maintaining food safety for consumers by adopting more eco-friendly production practices (Nam, 2020) for the social aspect of traditional herbal medicine agroindustry can not only maintain natural sustainability but also improve the positive image of their business in the eyes of consumers who are increasingly concerned about environmental issues (Sadiq et al., 2021). In the environmental aspect, by adopting eco-innovation, traditional herbal medicine agroindustry can reduce their environmental footprint (Chin et al., 2022), minimize adverse impacts, and at the same time, create opportunities to increase their competitiveness and business reputation in an era where sustainability is a significant concern for both consumers and other interested parties (Bhardwaj et al., 2023).

Although traditional herbal agroindustry offers various benefits in the context of sustainability, significant challenges and obstacles remain. Therefore, ecological innovation (eco-innovation) is needed to optimize resource management, minimize environmental impacts, and improve production efficiency in this business (Cherifi et al., 2019). This article attempts to raise the critical topic of eco-innovation in the traditional herbal agroindustry. It explores a gap analysis approach using the Objective, Goals, Strategies, and Measures (OGSM) framework to achieve sustainability in this sector (Z. Chen et al., 2023; Herkenrath et al., 2022). Paryontri et al. (2022) research emphasizes enhancing expertise and capabilities among players in the herbal medicine industry, focusing on refining product processing, packaging, and marketing strategies.

This research aims to introduce the critical context of the traditional herbal agroindustry, highlight the problems and opportunities facing this sector, and explain why eco-innovation is the main focus of this research. The novelty of the research lies in its unique focus on "eco-innovation for sustainability" within the realm of traditional herbal (jamu) agroindustry. Incorporating OGSM-Gap Analysis, specifically based on employee perceptions, adds a distinct dimension by offering a comprehensive understanding of how eco-innovation strategies are perceived and implemented within this industry, contributing valuable insights for sustainable practices and growth. We will also introduce the OGSM framework as an analytical tool used in this research to identify and fill gaps in sustainability efforts. Thus, this manuscript aims to provide deeper insight into how eco-innovation can play a crucial role in supporting the sustainability of traditional herbal agroindustry.

2. MATERIAL AND METHODS

2.1 Basic Research Methods

This research uses a basic case study method to deepen understanding of employee perceptions regarding eco-innovation in the traditional herbal medicine agroindustry. Cases that focus on employee perceptions enable the identification of barriers, problems, and opportunities that may be missed in broader research. In addition, analytical descriptive methods are used to provide a detailed picture of the organization's objectives, goals, eco-innovation strategies, and sustainability measurements in the business while detailing employee perceptions of these initiatives (Ain et al., 2019). The advantage of the case study method lies in an in-depth understanding of a more focused situation, while the analytical descriptive method provides a clear, holistic picture (Quintão et al., 2020). Combining these two methods will provide comprehensive insight into eco-innovation and employee perceptions in achieving sustainability in the traditional herbal medicine agroindustry.

2.2 Location Determination Method

This research deliberately selected 20 traditional herbal medicine agroindustries in the Solo Raya area, which includes Surakarta, Boyolali, Sukoharjo, Wonogiri, Sragen, Karanganyar, and Klaten, as research locations using a purposive location determination method. The reason behind choosing this area is that Solo Raya is known as a center for the traditional agroindustry of herbal medicine, which is rich in local wisdom and herbal medicine traditions (Mayasari & Sunariya, 2023). The advantage lies in the ability to gain deep insight into eco-innovation practices within the traditional herbal medicine sector in a region that explicitly emphasizes local herbs' ethnobotanical use. Research can identify challenges and opportunities that may not arise in other areas by focusing on the Solo Raya area. The results of this research can provide more relevant and applicable guidance for traditional herbal

medicine agroindustry in the region and contribute to the understanding of eco-innovation in the context of ethnobotanical use of traditional herbs.

2.3 Population and Sampling Methods

The population of this study consisted of all employees who worked in 20 traditional herbal medicine agroindustries in the Solo Raya area. A simple random sampling method was used to get a representative group (Jilcha Sileyew, 2020). Five employees from each agroindustry were chosen at random from their staff. Simple random sampling is a sampling method that gives each member of the population an equal opportunity to be sampled. In this context, the respondent selection process is carried out without regard to certain positions or characteristics so that every employee has the same opportunity to be part of the sample. The advantage of the simple random sampling method, according to Etikan & Babtope (2019), is to reduce bias in sampling and ensure that the research results are more representative of the variations in the population of employees of the traditional herbal medicine agroindustry in Solo Raya. Thus, this method provides a solid basis for analyzing employee perceptions and views regarding eco-innovation in the context of traditional herbal agroindustry in the region.

2.4 Data Collection Methods

This research collected data through various methods, including surveys, in-depth interviews, and direct observation. Surveys are used to collect quantitative data from respondents using structured questionnaires (Carpino et al., 2019). In addition, in-depth interviews were used to gain deeper insight from some selected respondents (Thompson et al., 2019). This method allows researchers to explore employee perspectives and experiences in detail. Direct observations were carried out to understand eco-innovation practices and the work environment dynamics in the traditional herbal medicine agroindustry in the Solo Raya area directly. Combining these three methods provides a comprehensive approach to collecting relevant and diverse data, allowing for deeper and richer analysis in the context of this research (Farquhar et al., 2020).

2.5 Data Analysis Methods

This research applies a unique approach by combining two methods, namely Organizational Objectives, Goals, Strategies, and Measures (OGSM) and the gap analysis method. The OGSM framework identifies and measures critical elements related to goals, targets, strategies, and sustainability measurements in the context of the traditional herbal medicine agroindustry in Solo Raya. According to Kunonga et al. (2010), this method is a strategic management concept used to plan and direct organizational goals and involves four main components:

- 1) Objectives are associated with the overarching vision that the organization aspires to accomplish. These objectives should be linked to the company's mission and show how to get the desired results.
- 2) Goals are related to specific targets that must be achieved to achieve goals. Goals must be measurable and directly related to the objectives set. Goals provide concrete steps that must be taken to achieve objectives.
- 3) Strategies related to action plans used to achieve goals and objectives. The strategy describes the approach or method to achieve the desired result. The strategy must match market conditions, available resources, and organizational strengths.
- 4) Measures related to performance indicators are used to measure progress and success in achieving goals and objectives. Measures must be objectively measurable and provide relevant information about the achievements achieved.

Table 1. Cross-tabulation formulation of OGSM-Gaps Analysis

OGSM Analysis	Statement	Gap Analysis			
		E (Expectation)	R (Realities)	R-E	Rank
	Objectives				
	Goals				
	Strategies				
	Measures				

Table 1 presents the cross-tabulation formulation of OGSM-Gaps Analysis, utilizing a Likert scale ranging from 5 (highest) to 1 (lowest). This scale captures the divergence between the perceived reality and the expected outcomes in the studied context. Respondents provided ratings for both expectation and reality for each OGSM component—Goals, Objectives, Strategies, and Measures. The scoring for the OGSM-Gaps Analysis is derived by calculating the difference between the expectation and reality scores. A positive gap indicates that the perceived reality exceeds expectations, while a negative gap signifies a shortfall in realization compared to expectations. This scoring methodology allows for a nuanced understanding of the alignment or misalignment between anticipated and actual organizational performance, shedding light on areas where strategic goals and objectives may need refinement or improvement within the traditional herbal (Jamu) agroindustry.

This research uses a gap analysis method to measure the disparity between expectations and reality in employee perceptions regarding eco-innovation in the traditional herbal medicine agroindustry in Solo Raya (Haming et al., 2019). Combining these two methods provides significant benefits by presenting data that can be analyzed comprehensively. It assists in producing rankings that provide in-depth insight into the extent to which sustainability goals and strategies have been achieved, as well as where improvements can be made in the context of the traditional herbal medicine agroindustry (Ismail et al., 2022). With two methods, this research can explore the dimensions in which differences occur in more depth. These methods can help identify areas that require improvement or change to increase sustainability in the traditional herbal agroindustry sector. The combined OGSM-Gaps analysis method becomes essential for understanding and improving employee perceptions and participation in eco-innovation to achieve sustainability goals (Lu et al., 2022).

3. RESULTS AND DISCUSSION

The analysis results using the Organizational OGSM (Objectives, Goals, Strategies, and Measures) method and the Gaps method reveal a comprehensive view regarding ecological innovation (eco-innovation) in the traditional herbal medicine agroindustry in Solo Raya. The OGSM method provides an in-depth understanding of the organization's goals and objectives, implementing strategies, and existing sustainability measures in this sector. On the other hand, Gap analysis allows for measuring the mismatch between employee expectations and the reality they experience, providing insight into where improvements are needed. The combined results of these two methods provide a holistic view that combines company perspectives and employee perceptions regarding eco-innovation, helps in detailing efforts to achieve sustainability, and identifies steps that can be taken to improve sustainability practices in the traditional herbal agroindustry sector.

Table 2. Cross-tabulation of employee perceptions using OGSM-Gaps analysis

OGSM Analysis	Statement	Gap Analysis			
		E	R	R-E	Rank
Objective	Improve the quality and safety of traditional herbal products (van Wyk & Prinsloo, 2020) (technical aspect)	3.01	4.47	1.46	1
	Increase accessibility and availability of quality traditional herbal medicine (Sorokina & Steinbeck, 2020) (economic aspect)	3.95	4.10	0.15	4
	Increase the added value of traditional herbal products (Saha & Basak, 2020) (economic aspect)	3.49	4.45	0.96	2
	Increase the competitiveness of traditional herbal products in the market (Tu & Wu, 2021) (economic aspect)	3.54	3.04	-0.50	5
	Encourage the sustainable use of local raw materials (Astutik et al., 2019) (social and environmental aspects)	3.35	4.01	0.66	3
Goals	Improve the quality of traditional herbal products to compete with similar products in the market (Guiné et al., 2020) (technical aspect)	3.45	4.60	1.15	3
	Increase the promotion and branding of traditional herbal products to be better known by the public (Mahardhika & Nurmahdi, 2023) (economic aspect)	4.03	3.51	-0.52	5
	Expanding the reach of the traditional herbal medicine market through online and offline marketing (Li et al., 2019) (economic aspect)	4.01	4.45	0.44	4
	Developing eco-friendly traditional herbal products to attract environmentally conscious consumers (Nguyen et al., 2020) (environmental aspect)	2.50	4.53	2.03	1
	Maintaining the genuineness and authenticity of traditional herbal medicine raw materials to maintain eco-product quality (Parveen et al., 2020) (technical and environmental aspects)	2.91	4.61	1.70	2
Strategies	Improve product quality and consumer experience through continuous research and development (J.-S. Chen et al., 2021) (technical aspect)	3.47	4.58	1.11	3
	Increase brand visibility through effective marketing strategies, including the use of social media, online advertising, and collaboration with influencers (Hendry et al., 2021) (economic aspect)	3.02	4.46	1.44	2
	Partnering with health stores, pharmacies, and alternative health centers to expand distribution networks (A. K. Shen & Peterson, 2019) (economic and social aspect)	2.56	4.45	1.89	1
	Conduct promotional activities such as discounts, product bundling, or loyalty programs to attract and retain consumers (Ofosu-Boateng, 2020) (economic aspect)	4.13	4.45	0.32	4
	Provide education and training to salespeople or store staff so that they can provide accurate information	3.50	2.90	-0.60	5

OGSM Analysis	Statement	Gap Analysis			
		E	R	R-E	Rank
	about the uses and benefits of traditional herbal products (Yao et al., 2020) (environmental aspect)				
Measures	Revenue growth (Rejeb et al., 2008) (economic aspect)	4.12	4.56	0.44	3
	Customer satisfaction (Oppong, 2021) (economic aspect)	2.51	4.57	2.06	1
	Product availability (Rahayu et al., 2020) (economic and social aspects)	4.47	4.53	0.06	4
	Operational efficiency (Calín-Sánchez et al., 2020) (technical and economic aspects)	3.54	3.39	-0.15	5
	Number of eco-product innovations (Ariana, 2019) (technical and environmental aspects)	3.49	4.45	0.96	2

Source: Primary data (2023)

3.1 Objective

Information from Table 2 shows that the traditional herbal medicine agroindustry organization in Solo Raya, in employees' perception, aims to implement green innovation (eco-innovation) in producing traditional herbal medicine using local ethnobotanical raw materials. Traditional herbal medicine agroindustry organizations strongly focus on improving the quality and safety of their products. These objectives are reflected in their efforts to improve the quality of the traditional herbal medicine they produce and ensure the product is safe for use by consumers.

Through steps such as selecting quality raw materials, implementing good production processes, and regular product testing, the traditional herbal medicine agroindustry aims to increase employee perceptions by 1.46 regarding aspects of the organization's eco-innovation objectives. This result aligns with research by Phu et al. (2020), which states that improving the quality and safety of traditional herbal medicine products has essential meaning for organizations because this shows the organization's commitment to providing quality and safe products for consumers. This effort can strengthen the organization's image in the market as a producer of traditional herbal medicine that has high-quality standards. From an employee perspective, improving product quality and safety can be a source of pride and motivation. Seeing their products continue to develop into better products, employees will feel that their contributions positively impact the organization's reputation and success.

The organization's aim to increase the added value of traditional herbal medicine products with a gap of 0.96 has a significant meaning in the traditional herbal medicine agroindustry. By focusing on increasing added value, organizations strive to increase the attractiveness of their products in the market. This action can be done in various ways, including increasing the health benefits traditional herbal medicine offers from eco-friendly production. This action certainly makes herbal medicine products more attractive to consumers. This result aligns with research by Wen et al. (2022), which states that increasing product-added value can increase product competitiveness in the market, help organizations achieve better profit margins, and strengthen their position in the herbal medicine industry. From an employee's perspective, achieving these goals can open up opportunities for new product development, innovation, and product updates that can increase job satisfaction. In addition, regular product updates can open up career opportunities for employees involved in the innovation process. As a result, achieving these objectives benefits the organization regarding competitiveness and profitability and positively impacts the motivation and development of employees who contribute to achieving these objectives.

The organization's objective of encouraging sustainable local raw materials with a gap value of 0.66 is essential in the sustainability strategy of the traditional herbal medicine agroindustry organization. These objectives emphasize the need to adopt sustainable raw materials that directly support the environment and local communities (in this case, farmers). This result is in line with Astutik

et al. research in 2019, which states that using sustainable local raw materials can create better relationships between organizations and local communities. This action includes collaboration with local farmers or producers, which can benefit both parties by creating local economic opportunities. In addition, using sustainable raw materials also contributes to environmental protection efforts because fewer negative impacts result from procuring eco-friendly raw materials. From an employee's perspective, this can increase a sense of pride because they feel they are contributing to the company's sustainability and social responsibility aspects. Employees feel more connected to the organization's objectives and perceive that their work positively impacts their community and environment.

The objective to increase accessibility and availability of quality traditional herbal medicine with a gap value of 0.15 is significant in the context of the traditional herbal medicine agroindustry. This objective aims to focus on increasing the availability of quality products in the market to ensure more people can access these products. This result aligns with research by Thakkar et al. (2020), which states that organizations can expand their market share by creating wider availability and presenting quality products to more consumers. The impact of this objective is significant, as increased accessibility can result in substantial business growth. From an employee perspective, this can significantly increase product distribution and sales, affecting job stability. Increased business can also open up opportunities for company growth and employee career development. Achieving these objectives can positively impact the organization and the employees working to achieve them by providing stability and growth opportunities.

3.2 Goals

According to information from Table 2, traditional herbal medicine agroindustry organizations in Solo Raya have goals related to green innovation (eco-innovation) by adopting local ethnobotanical raw materials in their traditional herbal medicine production. The aim is to support sustainability in the traditional herbal medicine industry. This approach reflects the organization's commitment to responsibly using local natural resources. This goal aligns with research by Surya et al. (2020), which states that using local raw materials supports flora conservation and ecosystem sustainability and creates social and economic benefits for local communities and farmers. In the context of green innovation, the organization acts as a change agent that aims to reduce negative environmental impacts and produce eco-friendly products. Thus, the organization seeks to actively support sustainability in the traditional herbal medicine industry through local ethnobotanical raw materials, creating ecological, economic, and social benefits and engaging local communities in these efforts.

Employees positively perceive the organization's goal to develop eco-friendly traditional herbal products with a gap score of 2.03, which is evidence of their strong commitment to green innovation and sustainability. The meaning behind this goal is to focus on creating products that consider environmental issues, aiming to attract consumers who are increasingly concerned about these issues. The impact of this goal is significant, as by achieving it, organizations can increase the appeal of their products in the market. This goal aligns with research by Duong (2021), who states that this action can attract a segment of consumers who are increasingly concerned about environmental issues and tend to look for more environmentally friendly products. Success in achieving this goal can also help create a positive image for the organization in the eyes of consumers and the wider public, which can bring long-term benefits in terms of reputation and customer relations. From an employee's perspective, achieving this goal can lead to a sense of pride as they feel they are contributing to a product that cares about environmental issues. This action can increase employee motivation and job satisfaction, which supports the organization's sustainability vision.

The organization's goal to maintain the authenticity of traditional herbal raw materials with a gap value of 1.70 indicates its focus on maintaining the integrity of its products. This result means it is essential to maintain the authenticity and authenticity of traditional herbal raw materials to maintain product quality. The impact of this goal is significant, as the authenticity of raw materials directly affects product quality and consumer satisfaction. This impact aligns with research by El-Dahiyat et al. (2020), which states that by maintaining authenticity, organizations can ensure that their products remain in line with the standards and tastes expected by customers. Employees feel that maintaining the authenticity of raw materials is essential to maintaining the product's image and reputation. Achieving

this goal can also affect customer loyalty, as they will feel more confident in the product. In terms of credibility, the organization can gain an edge in the market with reliable and high-quality products. In conclusion, maintaining the authenticity of traditional herbal ingredients is essential in maintaining product quality and supporting the organization's positive image.

The organization's goal to improve the quality of traditional herbal products with a gap value of 1.15 indicates the organization's determination to face an increasingly tight market. This result means there is a drive to improve the quality of traditional herbal products to compete effectively in an increasingly fierce competitive environment. The impact of achieving this goal is significant, resulting in better products and more substantial competitiveness in the market. This achievement aligns with research by Shen et al. (2019), which states that agro-industrial companies can attract more consumers and maintain market share by improving product quality. From an employee's perspective, this goal may create a drive to innovate, improve product quality, and contribute to the company's long-term success. These goals can create a passionate and innovative work environment where employees feel they have an essential role in improving product quality and organizational competitiveness. Success in achieving these goals will not only affect the organization's business growth but also strengthen the role of employees in achieving these goals.

The organization's goal is to expand the market reach of traditional herbal medicine through online and offline marketing, with a gap value of 0.44, indicating the organization's desire to grow and reach more consumers. This result means involving various marketing channels, both online and offline, to reach a broader market (N. C. Irawan et al., 2023). The impact of achieving this goal is the opportunity for increased revenue and business growth. This agroindustry goal aligns with research by Faqih et al. (2020), which states that agroindustry can reach more consumers and increase product sales by expanding market reach. From an employee's perspective, achieving this goal can lead to a drive to actively participate in marketing and expansion efforts, positively impacting job stability and career opportunities. Employees may feel involved in the company's growth and feel that their contributions to expansion efforts are meaningful. Success in achieving this goal will positively impact business growth and career development and increase employee engagement in achieving these goals.

3.3 Strategies

Table 2 provides information on the organizational strategies of traditional herbal medicine agroindustries related to green innovation using local ethnobotanical raw materials to support sustainability. Employee perceptions and involvement are critical in implementing eco-innovation strategies in traditional herbal medicine agroindustries. This strategy aligns with research by Ababneh (2021), which states that employees are essential in carrying out various initiatives and positively impacting the organization's sustainability. Employee support in green innovation strategies includes understanding eco-friendly practices, using local ethnobotanical raw materials, and reducing negative environmental impacts. In addition, employee motivation also plays an essential role in driving change and creating a work culture that supports green innovation. Active participation of employees in decision-making and solution development can increase their sense of belonging, provide additional motivation, and strengthen their involvement in the organization's goals and vision. With employee support, motivation, and participation, traditional herbal agroindustry organizations can achieve success in achieving sustainability goals and sustainable business growth.

The organization's strategy to partner with health shops, pharmacies, and alternative health centers in employee perception has positive results, with a gap value of 1.89, highlighting the organization's efforts to expand the distribution reach of traditional herbal medicine products. Research by Raus et al. (2020) states that consumers looking for health solutions will find it easier to access goods if they are distributed in collaboration with organizations in the health sector that align with this effort. The positive impact of implementing this strategy includes increased market share and sales. From an employee perspective, this can be seen as an opportunity to contribute to business expansion that positively impacts company growth and job stability. They feel proud and motivated to be part of this initiative that will expand product coverage and reach more consumers through relevant healthcare partners.

Employees' perceptions are positive towards the company's increasing brand visibility through effective marketing strategies, with a gap value of 1.44. This value reflects the importance of marketing strategies in developing traditional herbal brands and products. This strategy aligns with research by Carpio et al. (2019), who state that implementing practical strategies to increase the brand's presence and its products in the market, such as utilizing social media platforms and establishing partnerships with influential organizations. The positive impact of implementing this strategy includes increased brand awareness, attracting more consumers, and increased product sales. From an employee perspective, this can be interpreted as their essential contribution to strengthening the brand and product image. They take pride in actively participating in creative and effective marketing campaigns and feel involved in the company's success. Employees' awareness of their role in strengthening the brand and attracting consumers can provide additional motivation in marketing efforts and create a work atmosphere that supports the growth of the brand and the business.

Employees' positive perceptions are related to the company's strategy of improving product quality and customer experience through continuous research and development, with a gap value of 1.11. This strategy indicates an appreciation of continuous innovation and improving product quality and customer experience. This strategy aligns with research by Jakovljevic et al. (2021), which states that the organization's commitment to continuous innovation is to improve products and meet consumer expectations. Implementing this strategy has the potential to produce higher quality products, which in turn will increase customer satisfaction and strengthen the organization's reputation. From an employee perspective, this strategy reflects the organization's commitment to innovation and quality, which can motivate them to participate actively in product research and development. In addition, it also opens up opportunities for employees for career development in product research and development so that they feel involved in achieving the long-term success of the company and strengthen their sense of ownership in achieving these goals.

A gap value of 0.32 shows that employees have good views about the company's strategy to attract and keep customers through promotional activities like discounts, product bundling, or loyalty programs. This strategy aligns with research by Lin et al. (2021), which states that this strategy reflects recognition of the organization's efforts in retaining and attracting customers. This strategy also involves various promotions to retain and attract new customers, such as discount offers, product bundling, and loyalty programs. The implementation of this strategy has the potential to increase sales, maintain positive relationships with existing customers, and attract new customers, all of which support sustainable business. From an employee perspective, this strategy demonstrates the organization's efforts to maintain positive consumer relationships and a sustainable business. Employees feel involved in these efforts and realize their essential role in supporting the company's growth and maintaining customer loyalty. This strategy can provide additional motivation and strengthen their ownership in achieving these goals.

3.4 Measures

Table 2 includes organizational performance measures of traditional herbal medicine agroindustries related to green innovation using local ethnobotanical raw materials to support sustainability. Employees' perceptions of these performance measures can influence their motivation, commitment, and participation in efforts to achieve the organization's green innovation and sustainability goals. Success in these performance indicators, such as customer satisfaction and revenue growth, can motivate employees. In contrast, needed improvements in indicators such as operational efficiency can inspire employees to contribute to improvement efforts. Thus, employee perceptions are critical in achieving organizational success in green innovation and achieving sustainability goals.

Customer satisfaction, which scores 2.06 in Table 2, is a significant leading indicator in measuring the performance of traditional herbal medicine agroindustry organizations. It reflects the extent to which the products and services provided by the organization meet or even exceed customer expectations. These products and services align with research by Garai & Sarkar (2022), which states that a high customer satisfaction score indicates that the organization has successfully created traditional herbal medicine products that consumers want and appreciate. The positive impact of achieving high customer satisfaction can include increased customer loyalty, positive recommendations

that can expand the consumer base, and growth in market share. From an employee's perspective, this achievement can be a vital source of motivation, as they see the positive results of their efforts and dedication in creating products that satisfy customers. It can also create a sense of pride and a deeper understanding of the employee's role in the organization's success. It encourages them to continue working hard to meet customer needs and expectations with quality traditional herbal products.

The number of product innovations, which scored 0.96 in the table, is an indicator that reflects the extent to which traditional herbal agroindustry organizations are active in creating new or improving existing products. A positive score on the number of product innovations indicates that the organization has been successful in its efforts to develop new or better traditional herbal medicine products. This effort aligns with research by Guiné et al. (2020), which states that this indicator creates opportunities for product portfolio diversification that can support business growth by offering more choices to consumers. From an employee's perspective, a high score in the number of product innovations can provide an opportunity to be involved in developing exciting new products. This indicator can motivate employees by providing space to create, innovate, and actively participate in formulating products that meet customer needs and wants. Involvement in new product development can provide a strong sense of belonging and opportunities to expand employees' skills and knowledge. Thus, the number of positive product innovations can drive employee motivation and development and contribute to sustainable business growth.

Revenue growth, which scored 0.44 in the table, is a highly relevant indicator in measuring the performance of traditional herbal agroindustry organizations. It measures how much the organization has increased its revenue over time. A positive score in revenue growth indicates that the organization has been successful in its efforts to increase sales and revenue generated. This effort aligns with research by Vardhan and Gupta (2022), which states that achieving positive income growth can significantly impact employee job stability and career development opportunities. From an employee perspective, positive revenue growth creates favorable conditions. Business growth generally requires more labor, which means more excellent job stability. In addition, growing organizations tend to offer more opportunities for career development, training, and advancement on the job. Employees may see revenue growth as a sign of organizational success and feel motivated to contribute further to achieving company goals. Thus, positive revenue growth has a positive impact on employees and has the potential to create a dynamic and opportunity-filled work environment.

Product availability, with a score of 0.06 in the table, is an indicator that assesses the extent to which traditional herbal products are always available to consumers. A positive score in product availability indicates that the organization has succeeded in ensuring its products are always available in the market, thus meeting consumer needs (Suswadi et al., 2022). This indicator aligns with research by Otto et al. (2019), which states that the impact of profitable product availability includes increasing customer satisfaction because they can quickly get the products they need and maintain a stable market share. From an employee perspective, a positive score in product availability can mean more stable employment. Employees do not have to worry about significant business fluctuations or uncertainty in their jobs because products are always available to consumers. In addition, it also creates positive relationship maintenance with customers, as consistently available products can increase customer trust and loyalty to the brand and company. Therefore, favorable product availability positively impacts employees by offering stability in work and strengthening the company's relationship with customers.

3.5 Improvement of Agroindustry Negative Performance

Improving the negative performance of the OGSM-Gaps analysis based on employee perceptions is critical as it reflects imperfections in the organization's strategy and execution. Low scores in "providing education and training to salespeople or store staff" indicate that product information may lack accuracy, potentially harming brand image and customer satisfaction. Therefore, corrective actions are needed to ensure that the information provided to consumers is accurate and relevant.

In addition, low scores on "improving product promotion and branding" and "improving product competitiveness" indicate that traditional herbal products may be less recognized in the market and have limited competitiveness. Improvements in promotion and branding are needed to increase brand awareness, while increased competitiveness is needed to maintain business growth. Finally, a negative

“operational efficiency” score indicates that the organization’s internal processes are not optimal, which may hinder productivity and sustainability. Therefore, improvements in operational efficiency are necessary to reduce costs and improve overall organizational performance. Through these corrective actions, the organization can achieve its goals and increase employees’ positive perceptions, supporting business sustainability and growth.

The information in Table 3 shows that the improvement action of providing education and training to salespeople or store staff to provide accurate information about the uses and benefits of traditional herbal products has a positive impact on the agro-industrial organization. Employees agree with the action, reflecting their support for the organization’s efforts to improve performance in education and training. Organizing regular training is the first step received with high agreement (67%). This result indicates that employees see the value of a regular approach to improving salespeople’s and store staff’s knowledge of traditional herbal products (N. Irawan, 2023).

Furthermore, providing educational materials and practical guides on traditional herbs received support (59%). This result provides additional resources for salespeople to provide more comprehensive information to consumers. Although competency testing and knowledge updating received lower approval (34%), ensuring the information provided by salespeople or store staff remains accurate and up-to-date is still essential. With these improvements, organizations can enhance the ability of salespeople to provide correct information to consumers, which will support customer satisfaction and sustainable business growth (Aqmala & Ardyan, 2019).

Harmful performance improvements in improving the promotion and branding of traditional herbal medicine products to be better recognized by the public received support and approval from most employees. The steps taken reflect the organization’s earnest efforts to strengthen its brand image and increase the visibility of its products. Designing an effective marketing strategy is the first step that received high support (89%). With this approach, the organization can leverage social media, advertising, and promotional campaigns, considering the advantages and benefits of traditional herbal products. This strategy will help reach a wider audience and provide a better understanding of the product (Vial, 2019).

Table 3. Percentage of approval of action plans and corrective actions on negative performance

Actions	Description	Gaps	%
S	Provide education and training to salespeople or store staff so that they can provide accurate information about the uses and benefits of traditional herbal products (strategies problem)	-0,60	
1.	Conduct regular training for salespeople or store staff, including knowledge about traditional herbal products’ uses, benefits, and potential side effects.		67
2.	Provide educational materials and practical guidance on traditional herbs used in herbal products.		59
3.	Implement competency tests and knowledge updates regularly to ensure the information provided by salespeople or store staff remains accurate and up-to-date.		34
G	Increase the promotion and branding of traditional herbal products to be better known by the public (goals problem)	-0,52	
1.	They are designing effective marketing strategies, including social media, advertising, and promotional campaigns highlighting the advantages and benefits of traditional herbal products.		89
2.	Collaborate with influencers or figures who have an interest in traditional herbal products to get wider attention from the public.		42
3.	Participate in health exhibitions and relevant events to unveil traditional herbal medicine products to a discerning target audience.		57
O	Increase the competitiveness of traditional herbal products in the market (objectives problem)	-0,50	
1.	Conduct market research to understand consumer trends and preferences related to traditional herbal products.		38

Actions	Description	Gaps	%
2.	Innovate products by developing new variants, combining traditional ingredients with modern trends, or creating more attractive product packages.		54
3.	Ensure product quality and safety in processing, including relevant certifications and regulations.		78
M	Operational efficiency (measurements problem)	-0,15	
1.	Conduct operational audits to identify areas for improvement in terms of efficiency, such as energy use, waste management, or raw material use.		36
2.	Adopt more efficient technologies, such as automation of production processes or implementation of integrated supply chain management systems.		61
3.	Involve employees in planning and implementing operational efficiency initiatives, including rewards or incentives for successfully implemented ideas.		87

Source: Primary data (2023)

Collaboration with influencers or personalities interested in traditional herbal products is also supported (42%). This result can help create more incredible buzz and attention among the public. Furthermore, participating in health fairs or related events received approval (57%). This result allows organizations to introduce traditional herbal products to the right target audience. This strategy will help overcome negative performance issues and strengthen the brand image and visibility of traditional herbal products in the eyes of the public. This strategy can positively impact business growth and employee engagement in improvement efforts (Abdullahi et al., 2018).

The corrective actions to improve the competitiveness of traditional herbal products in the market have strong support from employees. These measures demonstrate the organization's commitment to achieving sustainability goals and improving product quality. Conducting market research to understand consumer trends and preferences is a crucial step, although it received lower support (38%). This strategy helps organizations understand changes in consumer tastes and adapt their products to market trends (Dzulfikar et al., 2022).

Undertaking product innovation received strong support (54%). With product innovation, organizations can create new variants, combine traditional ingredients with modern trends, or create more attractive product packages, increasing product appeal and improving market competitiveness. Ensuring product quality and safety in processing received the highest approval (78%). This strategy reflects the importance of meeting relevant standards and regulations in producing traditional herbal medicine. These actions will assist the organization in improving negative performance and achieving its goal of improving the competitiveness of traditional herbal products in the market. Employee support is valuable in this process and can motivate them to contribute to the company's long-term success (Daru, 2021).

Improving negative performance in terms of operational efficiency is an essential step for the traditional herbal medicine agroindustry. In this case, operational efficiency refers to improving the organization's production processes and resource management. Although the level of employee agreement varies, several actions can be taken to address this negative gap. First, conducting an operational audit is the first step to identify areas that require improvement (36% agree). This audit will help the organization identify issues that hinder efficiency, such as inefficient energy use, poor waste management, or suboptimal use of raw materials (Kasri et al., 2021).

Second, adopting more efficient technologies (61% agreed) can help improve operational efficiency. This result includes automating production processes and implementing integrated supply chain management systems. Technology can optimize operations and reduce waste. Finally, involving employees in planning and implementing operational efficiency initiatives and providing rewards or incentives for successfully implemented ideas are the actions that received the highest agreement (87% agree). Involving employees in efforts to improve efficiency can increase motivation and ownership, which may increase the effectiveness of these initiatives. With these actions, traditional herbal

agroindustry organizations can address negative operational efficiency gaps, supporting their business sustainability and growth (Permani et al., 2023).

4. CONCLUSIONS

The OGSM-Gaps analysis has yielded valuable insights into employee perceptions within a traditional herbal medicine agroindustry organization in Solo Raya. Notably, discrepancies surfaced between the organization's identified goals, objectives, strategies, and performance measures and employees' perceptions of their implementation. This study, employing OGSM-Gaps analysis, assessed the organizational performance of a traditional herbal medicine agroindustry, emphasizing eco-innovation and sustainability with local ethnobotanical raw materials. Employees strongly supported the organization's goals, objectives, and strategies for green products and quality improvement, signalling robust support for eco-innovation initiatives. However, negative gaps were identified in areas like enhancing product competitiveness and operational efficiency, underscoring the need for improvement. To address these gaps, involving employees in efficiency initiatives and enhancing education and training for sales or store staff is crucial. The focus on customer satisfaction as a key performance indicator and revenue growth underscores the critical parameters for organizational success. This research underscores the pivotal role of employee involvement in shaping strategic decisions, planning, and implementing green innovation initiatives. Positive employee perceptions of strategies supporting green innovation significantly impact the organization's ability to achieve sustainability goals. The study highlights that employee engagement and corrective actions such as training, competency development, and innovation are vital for overcoming negative gaps and fostering a sustainable and competitive traditional herbal agroindustry. Collaborative efforts between management and employees are pivotal for realizing sustainability and growth objectives, enabling these organizations to thrive in the market, positively influence the environment, and contribute to local communities.

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