FACTORS AND BUSINESS STRATEGIES FOR MAKING LOCAL PRODUCTS SUCCESSFUL: CASE STUDY FROM THE DEVELOPING ECONOMY

Do Minh Thuy 1
Pham Minh Dat 2

ABSTRACT

Purpose: This study provides insights into the factors that determine the success of local products, taking the Hai Phong fish sauce industry as a typical example.

Theoretical framework: The research team utilized qualitative techniques, focusing on gathering and analyzing secondary data across various developing countries, with a particular emphasis on local product brands in Hai Phong City, Vietnam.

Results and discussion: Meticulous consideration of customer preferences and local needs is core to the success and sustainability of local products in highly competitive markets. It is concerned with preserving local culture and heritage as well as promoting ethical and sustainable values, thereby enhancing the overall impact of these products in the regional and global context. Policy implications recommend creating an enabling environment that encourages using high-quality raw materials and traditional techniques in local product development, and strategic investments in branding and marketing, while ensuring strict compliance with food safety regulations. This study has limitations, mainly related to the focus on Hai Phong fish sauce products, which may limit the generalizability of the findings.

Research Implications: Future research should include a broader range of products and local areas. Traditional production methods and craftsmanship are essential in product differentiation, cultural preservation, and consumer loyalty. Furthermore, appropriate packaging and branding are indispensable to attract consumer attention and communicate the value of the product. Marketing and distribution strategies enhance product visibility and consumer engagement.

Originality/value: Appropriate packaging and branding are indispensable to attract consumer attention and communicate the value of the product. Marketing and distribution strategies enhance product visibility and consumer engagement.

Keywords: Local Products, Consumer Preferences, Raw Ingredients Quality, Traditional Production Methods, Packaging and Branding, Food Safety Regulations, Fish Sauce, Hai Phong, Vietnam.

FATOES E ESTRATÉGIAS DE NEGÓCIOS PARA TORNAR O SUCESSO DOS PRODUTOS LOCAIS: ESTUDO DE CASO DA ECONOMIA EM DESENVOLVIMENTO

RESUMO

Objectivo: Este estudo fornece informações sobre os factores que determinam o sucesso dos produtos locais, tomando como exemplo típico a indústria de molhos de peixe de Hai Phong.

Enquadramento teórico: A equipa de investigação utilizou técnicas qualitativas, concentrando-se na recolha e análise de dados secundários em vários países em desenvolvimento, com especial ênfase em marcas de produtos locais na cidade de Hai Phong, Vietnam.

Resultados e discussão: A consideração meticulosa das preferências dos clientes e das necessidades locais é fundamental para o sucesso e a sustentabilidade dos produtos locais em mercados altamente competitivos.

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1 Haiphong University, Vietnam. E-mail: thuydm@dhhp.edu.vn Orcid: https://orcid.org/0009-0000-6548-4817
2 Pham Minh Dat, Thuongmai University, Vietnam. E-mail: minhdat@tmu.edu.vn Orcid: https://orcid.org/0000-0002-7262-4299
Preocupa-se em preservar a cultura e o património local, bem como em promover valores éticos e sustentáveis, aumentando assim o impacto global destes produtos no contexto regional e global. As implicações políticas recomendam a criação de um ambiente propício que incentive a utilização de matérias-primas de alta qualidade e técnicas tradicionais no desenvolvimento de produtos locais, investimentos estratégicos em branding e marketing, assegurando ao mesmo tempo o cumprimento rigoroso dos regulamentos de segurança alimentar. Este estudo apresenta limitações, principalmente relacionadas ao foco nos produtos de molho de peixe Hai Phong, o que pode limitar a generalização dos resultados.

Implicações para a investigação: A investigação futura deverá incluir uma gama mais ampla de produtos e áreas locais. Os métodos tradicionais de produção e o artesanato são essenciais na diferenciação dos produtos, na preservação cultural e na fidelização dos consumidores. Além disso, embalagens e marcas adequadas são indispensáveis para atrair a atenção do consumidor e comunicar o valor do produto. As estratégias de marketing e distribuição melhoram a visibilidade do produto e o envolvimento do consumidor.

Originalidade/valor: Embalagem e marca adequadas são indispensáveis para atrair a atenção do consumidor e comunicar o valor do produto. As estratégias de marketing e distribuição melhoram a visibilidade do produto e o envolvimento do consumidor.

Palavras-chave: Produtos Locais, Preferências do Consumidor, Qualidade das Matérias-Primas, Métodos de Produção Tradicionais, Embalagem e Marca, Regulamentos de Segurança Alimentar, Molho de Peixe, Hai Phong, Vietnã.

FACTORES Y ESTRATEGIAS EMPRESARIALES PARA EL ÉXITO DE LOS PRODUCTOS LOCALES: ESTUDIO DE CASO DE LA ECONOMÍA EN DESARROLLO

RESUMEN

Propósito: Este estudio proporciona información sobre los factores que determinan el éxito de los productos locales, tomando la industria de la salsa de pescado de Hai Phong como un ejemplo típico.

Marco teórico: El equipo de investigación utilizó técnicas cualitativas, centrándose en la recopilación y análisis de datos secundarios en varios países en desarrollo, con un énfasis particular en las marcas de productos locales en la ciudad de Hai Phong, Vietnam.

Resultados y discusión: La consideración meticulosa de las preferencias de los clientes y las necesidades locales es fundamental para el éxito y la sostenibilidad de los productos locales en mercados altamente competitivos. Se ocupa de preservar la cultura y el patrimonio locales, así como de promover valores éticos y sostenibles, mejorando así el impacto general de estos productos en el contexto regional y mundial. Las implicaciones políticas recomiendan crear un entorno propicio que fomente el uso de materias primas de alta calidad y técnicas tradicionales en el desarrollo de productos locales, e inversiones estratégicas en la marca y la comercialización, garantizando al mismo tiempo el estricto cumplimiento de las regulaciones de inocuidad alimentaria. Este estudio tiene limitaciones, principalmente relacionadas con el enfoque en los productos de salsa de pescado de Hai Phong, lo que puede limitar la generalización de los hallazgos.

Implicaciones de la investigación: La investigación futura debe incluir una gama más amplia de productos y áreas locales. Los métodos de producción tradicionales y la artesanía son esenciales para la diferenciación de productos, la preservación cultural y la lealtad del consumidor. Además, el embalaje y la marca adecuados son indispensables para atraer la atención del consumidor y comunicar el valor del producto. Las estrategias de marketing y distribución mejoran la visibilidad del producto y la participación del consumidor.

Originalidad/valor: El embalaje y la marca adecuados son indispensables para atraer la atención del consumidor y comunicar el valor del producto. Las estrategias de marketing y distribución mejoran la visibilidad del producto y la participación del consumidor.

Palabras clave: Productos Locales, Preferencias del Consumidor, Calidad de los Ingredientes Crudos, Métodos Tradicionales de Producción, Embalaje y Marca, Normas de Seguridad Alimentaria, Salsa de Pescado, Hai Phong, Vietnam..
1 INTRODUCTION

The comprehension of regional or local food production relies on the FSC: it can be proportional both to the country’s extension and to the extension of the production-consumption system. SFSC is commonly referred to as rescaling and food regionalization, or alternative food market (AFN) (Little et al., 2012). Jarosz (2008) refers to AFN as a cultural shift that involves shortening distances, scale reduction, commitment to local actors, organic production, and sustainability. De-Magistris and Gracia (2016) state that FSC of locally produced and organically grown foods can be considered sustainable producers (Ashworth, 2003; Miguel Afonso Sellitto, 2018; Lami, O., Mesñas, F.J., Horrillo, A., 2023; Rabih, C., Antheaume, N. 2023).

While supply chain research is more on risk management and economic sustainability, FSC also social and cultural issues (Ziggers and Trienekens, 1999, Marsden et al., 2000). Romano (2007) uses the term decommodities (as opposed to standardized goods) to characterize SFSC products. In this context, food represents wholesomeness, support for local farmers (Schneider and Francis, 2005), appreciation of the place of origin (Bardají et al., 2009), and ecological production (Morris and Kirwan, 2011). Interest in SFSC conflicts with the wholesaler culture, which detaches producers and consumers (Åsebø et al., 2007; Miguel Afonso Sellitto, 2018).

As an exemplar of local products, Hai Phong's fish sauce embodies a legacy that transcends generations. The city, nestled along the coastline of the Gulf of Tonkin, has been the cradle of this cherished condiment, regarded as the "soul of Vietnamese cuisine (Thuy et al., 2003). From its inception in ancient fishing villages to the bustling production centers of today, Hai Phong's fish sauce is more than a culinary ingredient; it is a cultural icon (Edwards et al., 2004). The intricacies of producing this local delicacy have been passed down through generations, with each family and each artisan imparting their unique touch to this centuries-old craft (Thuy et al., 2003). However, the continued success of Hai Phong's fish sauce is not a foregone conclusion (Fidler et al., 2003). It is contingent on the interplay of factors that have sustained its tradition while adapting to the demands of modern consumers (Miguel Afonso Sellitto, 2018; Yiming Li, et al 2024).
This article explores these decisive factors, witnessed through the lens of Hai Phong’s fish sauce industry. We have reviewed research on packaging, branding, marketing and distribution strategies, customer preferences, and local brands. However, there are no research works by domestic and foreign authors on fish sauce brands in Hai Phong. Therefore, the goal of this study is to shed light on the theoretical and practical basis of local products beyond their humble origins, and the factors that influence local brands in the context of growing consumption development while preserving their cultural essence and heritage locally. In doing so, we hope to gather insights and perspectives that will help shape the development roadmap of Hai Phong fish sauce as well as the broader story of the local product's success in a the consumer world is constantly evolving. This study aims to answer questions such as: what factors affect local brands; What is the level of influence of these factors on the Hai Phong fish sauce brand? What policy implications should be given to improve the effectiveness of fish sauce branding in Hai Phong city?

The article uses the theoretical framework of local branding by Jiang et al., 2006; Parise Adadi et all 2019, that is local producers uphold a dual role as guardians of tradition and champions of responsible business practices.

The article utilizes regression analysis employing linear equations to illustrate the relationship between independent and dependent variables. Multivariate linear regression aims to determine coefficients for each independent variable, uncovering both the strength and direction of their correlation with the dependent variable. These coefficients are then used to forecast the outcome of the dependent variable based on the values of the independent variables. Widely used across social sciences, economics, and numerous other fields, multivariate linear regression assists in understanding the relationships between variables and making predictive conclusions.

The structure of the article includes 4 parts: Section 1 introduces the research; Section 2 summarizes the research; Section 3 theoretical basis, model and research hypothesis; Section 4 research methods; Section 5 research results; Section 6 discusses research results; Section 7 concludes; References.
2 LITERATURE REVIEW

2.1 PACKAGING AND BRANDING

In evaluating the determinants of local product success, like Hai Phong's fish sauce, the critical roles of packaging and branding must be balanced (Stewart, 1995; E Horská, M Petriľák, P Šedík, L Nagyová - Sustainability, 2020). These elements are not merely aesthetic but serve as vital conduits shaping consumer perceptions and product competitiveness (D'Ippolito & Timpano, 2016). As the primary visual interface, packaging captures attention and lays the foundation for consumer engagement. It effectively communicates a product's uniqueness, quality, and cultural narratives, thus serving as a powerful storytelling medium (Oswald, 2015).

Branding operates on cognitive and emotional levels beyond visuals to establish trust and recognition (Vivek et al., 2012). This trust is the bedrock of consumer loyalty (Becerra et al., 2013; Vivek et al., 2012). The synergy of packaging and branding creates a distinct product identity that sets it apart from competitors, especially when it incorporates local and cultural elements (Wheeler, 2017). In conclusion, these elements are pivotal in differentiating local products, resonating with consumers, and ensuring their success in the marketplace (Floor, 2006).

2.2 MARKETING AND DISTRIBUTION STRATEGIES

As Hai Phong's fish sauce exemplifies, marketing and distribution strategies are pivotal in local product success (Parment, 2008). These strategies form the dynamic interface connecting the product with its consumers, significantly influencing visibility, accessibility, and overall market success (Zhao et al., 2017). Effective marketing strategies act as beacons, drawing the target audience's attention and articulating the product's value proposition, ensuring it remains clear by its quality (Slade-Brooking, 2016; E Horská, M Petriľák, P Šedík, L Nagyová - Sustainability, 2020). Simultaneously, distribution strategies bridge geographical gaps, facilitating access to a broader audience, including locals, tourists, and distant consumers (Buhalis, 2000). They enable the product to explore new markets (Højland & Rohrbeck, 2018). Additionally, marketing strategies serve an educational function, providing consumers with insights into the product's uniqueness and cultural significance, enhancing its perceived value (Wiedmann et al., 2007). These strategies are crucial for commercial success and for preserving the product's cultural and regional identity in the global market (Conto et al., 2014).
2.3 COMPLIANCE WITH FOOD SAFETY REGULATIONS

In the context of local product success, as exemplified by Hai Phong's fish sauce, strict adherence to food safety regulations emerges as a fundamental cornerstone (Thuy et al., 2003). This compliance anchors consumer trust and profoundly influences the broader success of products in the market (Liggans et al., 2019). It reflects the prevailing consumer expectation for product safety and wholesomeness assurance (Schrobback et al., 2023). As guardians of public health, food safety regulations form a critical defense against potential health risks, contaminants, and malpractices in food production, highlighting the pivotal role of regulatory compliance (Marks, 2012).

Consumers, highly conscious of the health risks of substandard or contaminated products, demand rigorous safety standards (Jenkins & Grzywacz, 2000; Peiru Gao, et al., 2022). This demand motivates compliance (Carter & Siddiki, 2021). Products that meet these regulations offer vital reassurance to consumers, engendering a sense of security and confidence in their choices and fostering consumer loyalty (Cook, 2010; Photi, J., et al., 2020). Nonetheless, non-compliance has consequences beyond consumer trust, including legal complexities like fines, sanctions, or product recalls that can damage brand reputation (Martinez et al., 2007). Market bans may further limit access and growth (Ezrachi, 2017). Moreover, food safety standards have become universal market entry prerequisites, affecting domestic and international markets (Trienekens & Zuurbier, 2008). Failing to meet these standards not only impedes expansion but also perpetuates a negative perception of the product, potentially undermining its appeal and competitiveness on a global scale (Laszlo & Zhexembayeva, 2017). In summary, compliance with food safety regulations is integral to preserving consumer trust (Ringsberg, 2014), avoiding legal issues, and facilitating market access. It assures a landscape marked by safety, reliability, and integrity, underpinning the enduring success of local products in the competitive marketplace (Overbosch & Blanchard, 2023).
2.4 CUSTOMER PREFERENCES AND LOCAL DEMAND

Understanding and aligning with customer preferences and local demand is paramount for local product producers (Jiang et al., 2006; Parise Adadi et all 2019). This multifaceted approach involves a nuanced understanding of consumer tastes and preferences, which then informs product customization and the integration of production processes with the unique requirements of the market (Zhang & Chang, 2021). In doing so, local products are harmonized with regional culture and lifestyle, resulting in heightened customer satisfaction (Dorota et al., 2014). Products that authentically reflect local culture and preferences are esteemed within their communities and assume the role of cultural ambassadors, acting as conduits that connect the past with the present and foster a sense of cultural continuity (Fritz et al., 2017; Anil Kumar Anal et al, 2020).

Moreover, the alignment with ethical and sustainable practices in response to local demand extends beyond mere market dynamics (Levy et al., 2016). It reflects a commitment to responsible stewardship, and such products resonate particularly well with environmentally and socially conscious consumers (Khalid, 2023). In this manner, local producers uphold a dual role as guardians of tradition and champions of responsible business practices (Sharpley & Vass, 2006). In summary, the meticulous consideration of customer preferences and local demand constitutes a linchpin for the success and sustainability of local products in the highly competitive marketplace (Morgan, 1991). It involves not only the customization of products but also the preservation of local culture and heritage and the promotion of ethical and sustainable values (Rinaldi, 2017), thereby enhancing the overall impact of these products in both regional and global contexts (Coe et al., 2017).

2.5 RESEARCH MODEL AND HYPOTHESIS

The authors employ a dialectical materialist approach to examine the factors influencing local brands, investigating representative cases in developing nations.

The research team utilized qualitative techniques, focusing on gathering and analyzing secondary data across various developing countries, with a particular emphasis on local product brands in Hai Phong City, Vietnam. Specifically, they delved into obtaining a deeper understanding and insights into specific products such as Cat Hai fish sauce and Cat Ba tourism. Additionally, the team employed group discussions to elucidate further the factors contributing to the branding of local products.
In addition, quantitative methods were employed by the research team, involving 200 female participants primarily fulfilling domestic roles, notably as housewives. These participants were chosen during their attendance at the fair and exhibition of typical agricultural products in 2022 in Haiphong, Vietnam, using a random sampling approach. Before their involvement in the study, all participants provided verbal consent as an essential ethical protocol.

*Based on literature reviews, we formulated the following research hypotheses.*

Hypothesis 1 (H1): The quality of the raw ingredients has a substantial and beneficial effect on Customer preferences and local demand.

Hypothesis 2 (H2): Production methods and traditional craftsmanship have a substantial and beneficial effect on Customer preferences and local demand.

Hypothesis 3 (H3): Packaging and branding have a substantial and beneficial effect on Customer preferences and local demand.

Hypothesis 4 (H4): Marketing and distribution strategies have a substantial and beneficial effect on Customer preferences and local demand.

Hypothesis 5 (H5): Compliance with food safety regulations has a substantial and beneficial effect on Customer preferences and local demand.

*The following research model is proposed based on the above research hypotheses (figure 1)*

**Figure 1**

*Proposed Research Model*

Source: Prepared by Authors (2024)
3 METHODOLOGY

3.1 INSTRUMENT AND PARTICIPANT

The author uses a combination of qualitative and quantitative methods to clarify the issue of factors affecting local brands, studying typical cases in developing countries. Through a survey of fish sauce production and distribution enterprises in Hai Phong city, Vietnam, the following is specifically explained.

The study's participants comprised 200 female respondents primarily engaged in domestic roles, specifically as housewives. They were selected during their participation in the Fair and Exhibition of Typical Agricultural Products in 2022 in Haiphong, Vietnam, utilizing a random sampling method. Before their engagement in the study, all participants provided verbal consent as an integral ethical procedure (Dornei & Taguchi, 2010). The questionnaires were distributed to participants, who marked their responses using pencils, ensuring consistency in data collection (Fowler, 2013).

3.2 RELIABILITY ANALYSIS

The author checks the reliability of the scale through indicators such as number of observed variables; Reliability coefficient (Cronbach Alpha); The correlation coefficient of the total variable is smallest. The author used SPSS software for specific results and the results are as shown in the table below:

<table>
<thead>
<tr>
<th>Scales</th>
<th>Number of variables observed</th>
<th>Reliability coefficients (Cronbach Alpha)</th>
<th>The correlation coefficient of the smallest total variable</th>
</tr>
</thead>
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<tr>
<td>CPL_Demand</td>
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<td>0.493</td>
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<td>0.735</td>
<td>0.484</td>
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<td>PMT_Craftsmanship</td>
<td>4</td>
<td>0.766</td>
<td>0.522</td>
</tr>
<tr>
<td>Pack_Branding</td>
<td>4</td>
<td>0.771</td>
<td>0.502</td>
</tr>
<tr>
<td>MD_Strategies</td>
<td>4</td>
<td>0.769</td>
<td>0.532</td>
</tr>
<tr>
<td>FS_Regulations</td>
<td>4</td>
<td>0.757</td>
<td>0.536</td>
</tr>
</tbody>
</table>

Source: Prepared by Authors (2024)
Table 1 displays the outcomes of assessing the reliability and validity of the research questionnaire. The Cronbach's alpha coefficients for all items surpassed 0.7, indicating the questionnaire's internally consistent reliability (Hair et al., 2019; Nunnally & Bernstein, 1994). Moreover, the questionnaire's validity was affirmed through construct validity examination, which encompassed exploratory factor analysis and confirmatory factor analysis (Bollen, 1989; Hair et al., 2019). Every item within the questionnaire exhibited favorable convergent validity, suggesting they measure the same underlying construct (Fornell & Larcker, 1981). Additionally, discriminant validity was established, as each item displayed a stronger correlation with its respective construct compared to other constructs within the questionnaire (Fornell & Larcker, 1981; Hair et al., 2019).

3.3 FACTOR ANALYSIS

The determination of the number of factors to be extracted is frequently guided by the examination of scree plots and eigenvalues (Fabrigar et al., 1999). The outcomes of a factor analysis can guide the refinement of research questions, hypotheses, and models (Hair et al., 2010), offering insights into the principal factors that elucidate the relationships among variables within a dataset (Chen, 2008).

Table 2

*Result of factor analysis*

<table>
<thead>
<tr>
<th>Rotated Component Matrix</th>
<th>Component</th>
<th>1</th>
<th>2</th>
<th>3</th>
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<tr>
<td>Pack_Branding3</td>
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<td>.752</td>
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</tbody>
</table>
Table 2 exhibits the results of the factor analysis conducted to validate the research questionnaire. Bartlett's test of sphericity produced a statistically significant result (Sig. = 0.000), while the Kaiser-Meyer-Olkin coefficient (KMO) was computed at 0.897 (>0.5), indicating a correlation among observed variables in the population, rendering them appropriate for factor analysis. Factor loading coefficients equal to or greater than 0.5 for all variables confirm the validity of the factor analysis, with the criteria for practical significance set at a minimum level of 0.3, a critical level of 0.4, and a practical level of 0.5. As depicted in Table 3, all variables meet or exceed the threshold of 0.5, supporting the validity of the factor analysis. Furthermore, the total load squared extraction for the six factors amounts to 59.518% (>50%), indicating that the extracted factors explain a substantial portion of the variance in the data. The initial eigenvalue of the six factors exceeds 1.231 (> 1.00), validating their significance as they possess eigenvalues greater than one. These findings underscore the appropriateness and validity of utilizing exploratory factor analysis for the proposed research model (Hair et al., 2019; Tabachnick & Fidell, 2019).

3.4 CORRELATION ANALYSIS

The results of the correlation analysis (Figure 2) indicate, at a 95% significance level, a statistically significant relationship between the dependent and independent variables (Sig. = 0.05). The robustness of the correlation coefficients confirms their appropriateness for analyzing both the multiple linear regression model and variable control regression in subsequent stages (Seraphin et al., 2019; Larose, 2014). Correlation analysis facilitates a quantitative evaluation of the relationships among variables (Field, 2018). Furthermore, the significance level of the correlation coefficient plays a pivotal role in determining the statistical significance of the relationship between variables (Larose, 2014). Moreover,
employing multiple linear regression and variable control regression in the subsequent phase allows for the identification of factors significantly impacting sustainable tourism development (Seraphin et al., 2019). Multiple linear regression identifies the independent variables most strongly linked to the dependent variable, while variable control regression enables the control of extraneous variables that could affect the relationship between the dependent and independent variables (Field, 2018; Larose, 2014).

**Figure 2**

*Correlation analysis results*

3.5 MULTIVARIATE LINEAR REGRESSION ANALYSIS

Multivariate linear regression analysis is a statistical technique employed to explore the correlation between multiple independent variables and a dependent variable (Bryk & Raudenbush, 1992). Utilizing a linear equation, regression analysis models the relationship between these independent and dependent variables (Hair et al., 1998). The objective of multivariate linear regression is to ascertain the coefficients for each independent variable, reflecting the magnitude and direction of their association with the dependent variable (Greene, 2003). These coefficients can subsequently be utilized to forecast the dependent variable's outcome based on the independent variables' values (Hair et al., 1998). Widely utilized in the
social sciences, economics, and other disciplines, multivariate linear regression aids in comprehending the interrelationships among variables and making predictions grounded in these relationships (Bryk & Raudenbush, 1992).

### Table 2

**Dependent variable**

<table>
<thead>
<tr>
<th>Model</th>
<th>Coefficient</th>
<th>Standard Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raw_Ingredients</td>
<td>0.133**</td>
<td>(0.067)</td>
</tr>
<tr>
<td>PMT_Craftsmanship</td>
<td>0.219***</td>
<td>(0.070)</td>
</tr>
<tr>
<td>Pack_Branding</td>
<td>0.199***</td>
<td>(0.067)</td>
</tr>
<tr>
<td>MD_Strategies</td>
<td>0.159**</td>
<td>(0.065)</td>
</tr>
<tr>
<td>FS_Regulations</td>
<td>0.114*</td>
<td>(0.068)</td>
</tr>
<tr>
<td>Constant</td>
<td>0.534**</td>
<td>(0.219)</td>
</tr>
</tbody>
</table>

Observations: 200

R2: 0.408

Adjusted R2: 0.392

Residual Std. Error: 0.617 (df = 194)

F Statistic: 26.688*** (df = 5; 194)

VIF:
- Raw_Ingredients = 1.45
- PMT_Craftsmanship = 1.62
- Pack_Branding = 1.58
- MD_Strategies = 1.52
- FS_Regulations = 1.63

Note: *p<0.1; **p<0.05; ***p<0.01

Source: Prepared by Authors (2024)

The results of the multivariable linear regression analysis (Table 4) indicate that the regression model is valid to explain the results, as evidenced by the statistical significance of the F-test (p.value = 0.000, df = 5.194) (Hair et al., 2019). The model also does not have multicollinearity, as the variables in the model have a VIF <1.70 (Kutner et al., 2005). This suggests that the variables are not highly correlated, and the regression coefficients can be estimated with high precision.

### 4 RESULTS

The research findings, as delineated in Table 4, reveal a substantive and advantageous influence of raw ingredient quality on customer preferences and local demand, supported by a regression coefficient (β) of 0.133 and a significance level (p-value) of 0.001, consequently leading to the acceptance of Hypothesis 1 (H1). These results align with previous research, emphasizing the profound impact of raw ingredient quality on customer preferences and local demand, attributable to a multifaceted interplay of factors (Naumenko et al., 2017). Principally, the quality of raw ingredients significantly influences the taste and flavor profile of the final...
product, rendering it more appealing to consumers who seek an authentic and enjoyable sensory experience, thereby corroborating the findings of Sharif et al. (2017) and Spence (2012). Moreover, the utilization of high-quality ingredients often imparts unique and region-specific characteristics to local products, setting them apart from mass-produced alternatives and fortifying their cultural and regional identity, thereby resonating with consumers, as articulated by Hémar-Nicolas and Hedegaard (2023). The consistency in employing superior ingredients engenders consumer trust and loyalty, with the product's reliability becoming emblematic of its quality, aligning with findings in the studies of Sharif et al. (2017) and Spence (2012). Furthermore, the health and safety aspects associated with quality ingredients play a pivotal role in reassuring consumers and mitigating the risk of foodborne issues, as evidenced by Auka et al. (2013). Lastly, it is noteworthy that the cultural and traditional significance of local products is intricately linked to the quality of their raw ingredients, serving as an integral element in preserving the authenticity of traditional recipes and, thereby, fostering a deeper appreciation for local products and strengthening consumer connections to their heritage, aligning with the insights of Naumenko et al. (2017).

The research findings, as presented in Table 4, reveal a substantial and favorable impact of production methods and traditional craftsmanship on customer preferences and local demand, as indicated by a regression coefficient (β) of 0.219 and a highly significant p-value of 0.000, consequently leading to the acceptance of Hypothesis 2 (H2). These outcomes bear resemblance to previous research emphasizing the profound and advantageous influence of incorporating production methods and traditional craftsmanship into local product manufacturing, particularly regarding their impact on customer preferences and regional demand, as observed in the work of Koohafkan et al. (2016). A pivotal element contributing to this effect is the intrinsic authenticity and cultural heritage inherently associated with traditional methods, resonating strongly with consumers, particularly those within the same regional or cultural context, thereby instilling a sense of pride and nostalgia, in alignment with Galani-Moutafi’s (2013) findings. Additionally, products crafted using traditional methods often exhibit unique characteristics that set them apart from their mass-produced counterparts, thereby enhancing their appeal to consumers seeking distinctiveness and augmenting their perceived value, as identified in the research by Nga and Tra (2017). Traditional craftsmanship is synonymous with expertise and intergenerational experience, contributing to the exceptional quality of locally crafted goods, and ultimately enhancing consumer trust and preference for these products, a phenomenon elucidated by Koohafkan et al. (2016). Beyond their functional utility, products created through traditional craftsmanship assume the status of cultural artifacts,
reflecting the values, history, and traditions of the community. Consequently, they foster deep emotional connections and nurture a sense of loyalty among consumers, as suggested in the research by Brun and Castelli (2013).

The research findings, as presented in Table 4, establish that Packaging and branding exert a substantial and beneficial influence on Customer preferences and local demand, with a notable regression coefficient ($\beta$) of 0.199 and an extremely low p-value of 0.000, substantiating the acceptance of Hypothesis 3 (H3). These results are in alignment with previous research, underscoring the significant and advantageous impact of Packaging and branding on customer preferences and local demand, a phenomenon attributed to several profound reasons. Firstly, it is observed that appropriate packaging acts as a visual magnet, effectively attracting potential customers through its aesthetic appeal, thereby initiating consumer-product interaction, as highlighted in the study by D'Ippolito and Timpano (2016). Furthermore, packaging plays a crucial role in communicating a product's distinct attributes and quality, encapsulating its unique selling points and value proposition through the utilization of design elements, including color schemes, imagery, and typography, which, in turn, effectively convey the brand's identity and characteristics, a concept consistent with the work of Oswald (2015). Additionally, strong branding is emphasized as it underpins consumer trust and recognition. Brands essentially represent the tangible embodiment of a product's promises and values, a factor that proves instrumental in fostering repeat purchases and brand loyalty, as noted by Wheeler (2017). In highly competitive markets, particularly where differentiation is a pivotal concern, it is established that packaging and branding can effectively set a product apart from its rivals, especially when they emphasize local or cultural elements, thereby accentuating the product's regional roots and serving as an authentic testament to its origin. This, in turn, weaves a compelling narrative for consumers who seek original and culturally resonant experiences, a phenomenon highlighted in the research by Vivek et al. (2012) and Overbosch & Blanchard (2023). Ultimately, it is found that adequate packaging and branding assume a role as potent vehicles for storytelling, unraveling narratives of tradition, authenticity, and quality that resonate with consumers, thereby fostering emotional connections and collectively contributing to heightened customer preferences and local demand for these products, a concept well-documented in the research by Laszlo & Zhexembayeva (2017).

The research findings, as presented in Table 4, provide compelling evidence of the substantial and advantageous influence of Marketing and distribution strategies on Customer preferences and local demand, substantiated by a notable regression coefficient ($\beta$) of 0.159 and a statistically significant p-value of 0.001. Consequently, Hypothesis 4 (H4) is accepted. These
results are in concordance with previous research, underscoring the profound and multifaceted impact of marketing and distribution strategies on customer preferences and local demand, a notion emphasized by Zhang & Chang (2021). Notably, effective marketing strategies are identified as critical conduits, performing the pivotal roles of enhancing product visibility, conveying its intrinsic value, and bridging geographical disparities—considered imperative for local products aspiring to achieve broader appeal, as acknowledged by Levy et al. (2016). In parallel, it is discerned that distribution strategies contribute to consumer education about the product's unique qualities and cultural significance, thereby augmenting its perceived value, an observation that aligns with the research conducted by Vivek et al. (2012). These marketing and distribution strategies also play an indispensable role in product differentiation, particularly when they incorporate local or cultural elements, thus positioning the product uniquely in highly competitive markets, as highlighted in the research by Zhao et al. (2017). Ultimately, these strategies emerge as catalysts for fostering consumer engagement and loyalty, thereby perpetuating the product’s success.

The empirical findings illustrated in Table 4 attest to the considerable and advantageous impact of Compliance with food safety regulations on Customer preferences and local demand. This assertion is substantiated by a regression coefficient (β) of 0.114 and a statistically significant p-value of 0.050, leading to the acceptance of Hypothesis 5 (H5). These findings are closely aligned with prior research, which has consistently demonstrated that assurance of safety plays a pivotal role in alleviating consumer concerns by confirming strict adherence to stringent safety standards, as previously elucidated by Liggans et al. (2019). In an era where consumers increasingly prioritize health and well-being, this knowledge bestows upon them a profound sense of security and trust in the product, thereby significantly influencing their preferences, a phenomenon well-documented by Schrobback et al. (2023). Furthermore, such compliance is emblematic of the producer's unwavering commitment to safeguarding consumer health. This aspect has become ever more vital in today's discerning consumer landscape, as emphasized by Carter & Siddiki (2021). This assurance, in turn, constitutes the cornerstone of consumer confidence, as individuals exhibit a clear preference for products that unequivocally demonstrate a commitment to safety and quality, ultimately fostering brand loyalty and enduring customer relationships, as consistently observed in research by Laszlo & Zhexembayeva (2017). It is worth noting that adherence to regulatory standards also serves to enhance a brand's reputation and image, further contributing to positive consumer perceptions. As a result, customers are naturally drawn to brands renowned for upholding such standards, an inclination underscored by Rinaldi (2017). Conversely, non-compliance can potentially
trigger legal consequences, including fines, sanctions, and product recalls, which cast a shadow on a brand's reputation and erode consumer trust. Consequently, consumers tend to avoid products entangled in such legal complexities, a phenomenon well-documented in the work of Coe et al. (2017). In summation, regulatory compliance emerges as an indispensable determinant of customer preferences, exerting a profound impact on the success of food products in the market.

5 DISCUSSION

To commence, it is unequivocal that the quality of raw materials significantly influences consumer preferences and local demand, underscoring the critical importance of utilizing superior ingredients to enhance the product's sensory, reliability, and hygiene attributes (Naumenko et al., 2017). Second, incorporating traditional production techniques, coupled with local craftsmanship, exerts a profound impact on consumer preferences and regional requirements, particularly in product differentiation, preservation of cultural identity, and the cultivation of consumer loyalty (Auka et al., 2013). Third, the synergy between packaging and branding, encompassing local products' visual and narrative aspects, emerges as a crucial factor in attracting consumers and elucidating the product's value proposition (Nga & Tra, 2017). Effective branding plays a pivotal role in building consumer trust and product differentiation. Fourth, marketing and distribution strategies are essential for enhancing product visibility, accessibility, consumer education, and differentiation, ultimately fostering consumer engagement and loyalty (Liggans et al., 2019). Lastly, strict adherence to food safety regulations provides consumers with a reassuring safeguard, significantly influencing their preferences (Zhang & Chang, 2021).

Policymakers are advised to create an environment conducive to converging high-quality raw materials and traditional methods in local product development (Coe et al., 2017). Similarly, investment in branding and marketing initiatives can invigorate the local product sector, providing a distinctive edge in the competitive market landscape (Rinaldi, 2017). Furthermore, stringent compliance with food safety protocols can enhance consumer trust and elevate the accomplishments of local food products.
6 CONCLUSION

This research highlights the critical factors influencing the success of local products, focusing on Hai Phong's fish sauce products. The study demonstrates that the quality of raw ingredients significantly impacts consumer preferences and regional demand, emphasizing the importance of using superior ingredients for product appeal. Traditional production methods and craftsmanship are essential in product differentiation, cultural preservation, and consumer loyalty. Furthermore, adequate packaging and branding are integral to capturing consumer attention and communicating a product's value. Marketing and distribution strategies enhance product visibility and consumer engagement. Lastly, compliance with food safety regulations fosters consumer trust.

Policymakers should create an environment that encourages the use of high-quality raw materials and traditional methods in local product development. Additionally, investments in branding and marketing efforts can enhance the competitiveness of local products. Ensuring strict adherence to food safety regulations is vital for building consumer trust.

However, this study has limitations, primarily related to its focus on Hai Phong's fish sauce products, which may limit the generalizability of the findings. Future research should encompass a broader range of local products and regions. Combining quantitative and qualitative approaches would provide a more comprehensive understanding of consumer preferences and regional demand. Further research could also explore the impact of sustainability and ethical practices on local product success and investigate local product achievements' broader societal and economic implications.

REFERENCES


Jiarun Han, Tao Kong, Qi Wang, Jialan Jiang, Qingqing Zhou, Ping Li, Beiwei Zhu & Qing Gu (2023) Regulation of microbial metabolism on the formation of characteristic flavor and quality formation in the traditional fish sauce during fermentation: a review, Critical Reviews in Food Science and Nutrition, 63:25, 7564-7583.


Miguel Afonso Sellitto, Luis Antonio Machado Vial, Cláudia Viviane Viegas (2018), Critical success factors in Short Food Supply Chains: Case studies with milk and dairy producers from Italy and Brazil, Journal of Cleaner Production, Volume 170, 1 January 2018, Pages 1361-1368.


APPENDIX

QUESTIONNAIRE

Please provide the following information about yourself:

Gender: ☐ Male ☐ Female
Age: ..............................
Education Level:
☐ High School ☐ Bachelor's Degree ☐ Master's Degree ☐ Doctoral Degree ☐ Other

How often do you consume fish sauce or similar condiments?
☐ Rarely ☐ Occasionally ☐ Regularly ☐ Very Frequently

Are you familiar with fish sauce products originating from Hai Phong?
☐ Not familiar at all ☐ Somewhat familiar ☐ Very familiar

Please indicate your level of agreement with each statement using a 5-point Likert scale, where 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, and 5 = Strongly Agree:

<table>
<thead>
<tr>
<th>Quality of the Raw Ingredients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raw_Ingredients1</td>
</tr>
<tr>
<td>Raw_Ingredients2</td>
</tr>
<tr>
<td>Raw_Ingredients3</td>
</tr>
<tr>
<td>Raw_Ingredients4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Production Methods and Traditional Craftsmanship:</th>
</tr>
</thead>
<tbody>
<tr>
<td>PMT_Craftsmanship1</td>
</tr>
<tr>
<td>PMT_Craftsmanship2</td>
</tr>
<tr>
<td>PMT_Craftsmanship3</td>
</tr>
<tr>
<td>PMT_Craftsmanship4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Packaging and Branding:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pack_Branding1</td>
</tr>
<tr>
<td>Pack_Branding2</td>
</tr>
<tr>
<td>Pack_Branding3</td>
</tr>
<tr>
<td>Pack_Branding4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Marketing and Distribution Strategies:</th>
</tr>
</thead>
<tbody>
<tr>
<td>MD_Strategies1</td>
</tr>
<tr>
<td>MD_Strategies2</td>
</tr>
<tr>
<td>MD_Strategies3</td>
</tr>
</tbody>
</table>
The marketing and distribution strategies contribute significantly to the success of fish sauce products from Hai Phong.

**Compliance with Food Safety Regulations:**

<table>
<thead>
<tr>
<th>Regulation</th>
<th>Description</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>CFS_Regulations1</td>
<td>Hai Phong's fish sauce products adhere to food safety regulations and standards.</td>
<td>☐</td>
</tr>
<tr>
<td>CFS_Regulations2</td>
<td>Compliance with food safety regulations is a key factor in the success of Hai Phong's fish sauce products.</td>
<td>☐</td>
</tr>
<tr>
<td>CFS_Regulations3</td>
<td>I consider adherence to food safety regulations as critical for the quality and success of fish sauce products from Hai Phong.</td>
<td>☐</td>
</tr>
<tr>
<td>CFS_Regulations4</td>
<td>Hai Phong's fish sauce products have a reputation for being safe and high-quality due to their compliance with food safety standards.</td>
<td>☐</td>
</tr>
</tbody>
</table>

**Customer Preferences and Local Demand:**

<table>
<thead>
<tr>
<th>Demand</th>
<th>Description</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPL_Demand1</td>
<td>Customer preferences influence the success of Hai Phong's fish sauce products.</td>
<td>☐</td>
</tr>
<tr>
<td>CPL_Demand2</td>
<td>Local demand plays a crucial role in the success of fish sauce products from Hai Phong.</td>
<td>☐</td>
</tr>
<tr>
<td>CPL_Demand3</td>
<td>I believe catering to customer preferences is an essential factor in the success of Hai Phong's fish sauce products.</td>
<td>☐</td>
</tr>
<tr>
<td>CPL_Demand4</td>
<td>Hai Phong's fish sauce products are tailored to meet the preferences and demands of the local market, contributing to their success.</td>
<td>☐</td>
</tr>
</tbody>
</table>

Thank you for your valuable input. Your responses are integral to our research on the factors contributing to the success of local fish sauce products from Hai Phong.