

EXAMINING BRAND EQUITY AND TOURISTS' PURCHASING MOTIVATIONS TOWARDS THE WORLD'S BEST RICE 'ST25' FOR VIETNAM'S FUTURE SUSTAINABLE FOOD TOURISM DESTINATION

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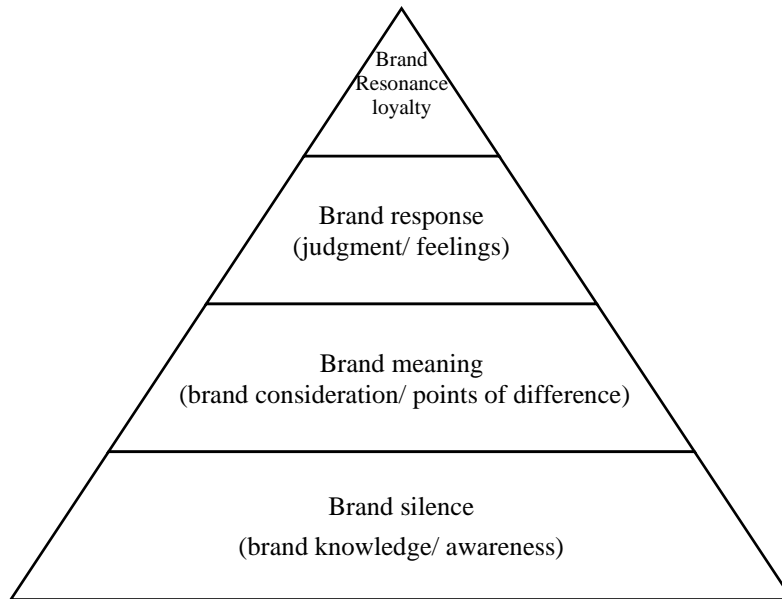
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Appendix 1. Customers-based brand equity by Keller (2002)



Appendix 2. Measures of the Study

| Variables | | Source |
|--------------------------------------|--------------------------------|------------|
| 1. SOUVENIRS' CHARACTERISTICS | | Lin (2016) |
| <i>SCQ: Quality</i> | | |
| SCQ1 | Natural and organic | |
| SCQ2 | Environmental sustainability | |
| SCQ3 | Healthy | |
| SCQ4 | Quality | |
| SCQ5 | Flavor versatility | |
| <i>SQS: Symbol</i> | | |
| SQS1 | Authentic | |
| SQS2 | Indigenous | |
| SQS3 | Traditionalism and inheritance | |
| SQS4 | Craftsmanship | |

| Variables | | Source |
|--|---|--------|
| SQS5 | Story and reminiscent | |
| SQS6 | Fashion and modern | |
| SQI: Innovation | | |
| SQI1 | It should be normalized with an essential function. | |
| SQI2 | It should be used for various foods. | |
| SQI3 | Procedure innovation | |
| SQI4 | Visual appreciation and creativity | |
| SQI5 | Texture modification | |
| SQP: Practicality | | |
| SQP1 | Portable | |
| SQP2 | Convenience and practical | |
| SQP3 | Reasonable price | |
| 2. CUSTOMERS' BASED BRAND EQUITY (CBBE) | | |
| CPQ: Perceived quality | | |
| CPQ1 | I trust the quality of products from ST25. | |
| CPQ2 | Products from ST25 would be of outstanding quality. | |
| CPQ3 | Products from ST25 offer excellent features. | |
| CBA: Brand awareness | | |
| CBA1 | Some characteristics of ST25 come to my mind quickly. | |
| CBA2 | I can recognize ST25 quickly among other competing brands. | |
| CBA3 | I am familiar with the ST25 brand. | |
| CBS: Brand Associations | | |
| CBS1 | ST25 has a unique brand image compared to competing brands | |
| CBS2 | I respect and admire people who use ST25. | |
| CBS3 | I like the brand image of ST25. | |
| CBS4 | I like and trust the scientists who made ST25 products. | |
| CBL: Brand Loyalty | | |
| CBL1 | I consider myself to be loyal to ST25. | |
| CBL2 | When buying rice, ST25 would be my first choice. | |
| CBL3 | I will keep buying ST25 as long as it provides satisfactory products. | |
| CBL4 | I am still willing to buy ST25 even if its price is slightly higher than its competitors. | |
| CBL5 | I would love to recommend ST25 to my friends. | |

Keller
(2002)
modified by
Tong &
Hawley
(2009)

| Variables | | Source |
|----------------------------------|---|-------------------|
| CBE: Brand Equity | | |
| CBE1 | Even if another brand has the same features as ST25, I would prefer to buy ST25. | |
| CBE2 | If another brand is not different from ST25 in any way, it seems more intelligent to purchase ST25. | |
| CBE3 | ST25 is more than a product to me | |
| 3. PURCHASING MOTIVATIONS | | Wilkins (2010) |
| PMG: Gifts | | |
| PMG1 | ST25 Rice and its related products make a good gift | |
| PMG2 | Buying ST25 Rice and its related products for others shows that you are thinking of them. | |
| PMG3 | I generally buy food gifts for my family or friends. | |
| PMG4 | I buy ST25 Rice and its related products as a gift to take when visiting family and friends. | |
| PMG5 | Buying ST25 Rice and its related products for family or friends is obligatory after the trip. | |
| PMG6 | I buy souvenirs as honorarium gifts as thanks. | |
| PMM: Memory | | |
| PMM1 | ST25 Rice and its related products allow me to have a memento of where I have been | |
| PMM2 | ST25 Rice and its related products are a reminder of how memorable my travel experiences were | |
| PMM3 | I buy ST25 Rice and its related products that create an association with the place I visited. | |
| PMM4 | ST25 Rice and its related products I buy to bring the connection to my trip | |
| PMM5 | I like to buy ST25 Rice and its related products that identify where I've been | |
| PME: Evidence | | |
| PME1 | I like ST25 Rice and its related products that you can discuss with others. | |
| PME2 | Buying ST25 Rice and its related products allows you to share your experience with others. | |
| PME3 | I like to buy ST25 Rice and its famous products from a particular place. | |

Appendix 3. Descriptives results

| Category | Details | Frequency | Percentage |
|----------------|---------------|-----------|------------|
| Gender | Male | 109 | 44.9% |
| | Female | 134 | 55.1% |
| Working status | Employed | 108 | 44.4% |
| | Studying | 57 | 23.5% |
| | Self-employed | 78 | 32.1% |
| Monthly income | Less than 5 | 27 | 11.1% |

| Category | Details | Frequency | Percentage |
|--|--------------|-----------|------------|
| (million VND per month) | 5 to 10 | 42 | 17.3% |
| | 10 to 15 | 67 | 27.6% |
| | 15 to 20 | 61 | 25.1% |
| | More than 20 | 46 | 18.9% |
| Travelling frequency in recent five consecutive years (times per year) | 1 – 2 | 84 | 34.6% |
| | 3 – 4 | 53 | 21.8% |
| | 5 – 6 | 65 | 26.7% |
| | More than 7 | 41 | 16.9% |
| The proportion of souvenir expenses/ total expense | Never | 8 | 3.3% |
| | < 20% | 43 | 17.7% |
| | 20 – 50% | 131 | 53.9% |
| | > 50% | 61 | 25.1% |
| The ratio of food/ total souvenirs | Never | 43 | 17.7% |
| | < 10% | 63 | 25.9% |
| | 10 – 30% | 43 | 17.7% |
| | 30 – 50% | 55 | 22.6% |
| | > 50% | 39 | 16.0% |
| The ratio of rice products bought/ total souvenir | Never | 14 | 5.8% |
| | 1 – 2 times | 15 | 6.2% |
| | 3 – 4 times | 125 | 51.4% |
| | 5 – 6 times | 33 | 13.6% |
| | > 7 times | 56 | 23.0% |
| Acknowledgement of Vietnamese Rice | Yes | 214 | 88% |
| | Not sure | 14 | 5.8% |
| | No | 15 | 6.2% |
| Acknowledgement of Rice ST25 | Yes | 211 | 86.9% |
| | Not sure | 13 | 5.3% |
| | No | 19 | 7.8% |

Appendix 4. Cronbach's Alpha analysis

| Contents | | Variables | Corrected item - Total correlation | Cronbach's Alpha If item deleted |
|---|--|---|------------------------------------|----------------------------------|
| Attributes | Quality Cronbach's Alpha = 0.847 | SCQ1 | 0.686 | 0.807 |
| | | SCQ2 | 0.569 | 0.838 |
| | | SCQ3 | 0.715 | 0.800 |
| | | SCQ4 | 0.716 | 0.799 |
| | | SCQ5 | 0.594 | 0.832 |
| | Symbol Cronbach's Alpha = 0.845 | SQS1 | 0.677 | 0.810 |
| | | SQS2 | 0.575 | 0.831 |
| | | SQS3 | 0.626 | 0.820 |
| | | SQS4 | 0.650 | 0.815 |
| | | SQS5 | 0.584 | 0.829 |
| | | SQS6 | 0.655 | 0.815 |
| | Innovation Cronbach's Alpha = 0.790 | SQI1 | eliminated | |
| | | SQI2 | 0.303 | 0.867 |
| | | SQI3 | 0.619 | 0.729 |
| | | SQI4 | 0.780 | 0.641 |
| | | SQI5 | 0.735 | 0.667 |
| | Practicality Cronbach's Alpha = 0.738 | SQP1 | 0.636 | 0.561 |
| | | SQP2 | 0.538 | 0.682 |
| | | SQP3 | 0.519 | 0.703 |
| | CBBE model | Perceived Quality Cronbach's Alpha = 0.861 | CPQ1 | 0.771 |
| CPQ2 | | | 0.697 | 0.842 |
| CPQ3 | | | 0.744 | 0.798 |
| Brand Awareness Cronbach's Alpha = 0.831 | | CBA1 | 0.713 | 0.754 |
| | | CBA2 | 0.657 | 0.803 |
| | | CBA3 | 0.714 | 0.744 |
| Brand Association Cronbach's Alpha = 0.820 | | CBS1 | 0.686 | 0.754 |
| | | CBS2 | 0.573 | 0.811 |
| | | CBS3 | 0.677 | 0.757 |
| | | CBS4 | 0.648 | 0.772 |
| Brand Loyalty Cronbach's Alpha = 0.875 | | CBL1 | 0.788 | 0.830 |
| | | CBL2 | 0.682 | 0.856 |

| Contents | | Variables | Corrected item - Total correlation | Cronbach's Alpha If item deleted |
|-----------------------|---|-----------|------------------------------------|----------------------------------|
| | | CBL3 | 0.694 | 0.852 |
| | | CBL4 | 0.696 | 0.851 |
| | | CBL5 | 0.675 | 0.856 |
| | Brand Equity Cronbach's Alpha = 0.764 | CBE1 | 0.652 | 0.620 |
| | | CBE2 | 0.560 | 0.727 |
| | | CBE3 | 0.581 | 0.701 |
| Purchasing motivation | Purchasing as Gifts Cronbach's Alpha = 0.880 | PMG1 | 0.691 | 0.858 |
| | | PMG2 | 0.685 | 0.859 |
| | | PMG3 | 0.560 | 0.879 |
| | | PMG4 | 0.759 | 0.847 |
| | | PMG5 | 0.671 | 0.863 |
| | | PMG6 | 0.771 | 0.845 |
| | Purchasing as Memories Cronbach's Alpha = 0.898 | PMM1 | 0.748 | 0.878 |
| | | PMM2 | 0.689 | 0.890 |
| | | PMM3 | 0.774 | 0.871 |
| | | PMM4 | 0.756 | 0.874 |
| | | PMM5 | 0.786 | 0.868 |
| | Purchasing as Experiences Cronbach's Alpha = 0.804 | PME1 | 0.695 | 0.685 |
| | | PME2 | 0.613 | 0.769 |
| | | PME3 | 0.646 | 0.739 |

Appendix 5. EFA Results

| Seq. | Contents | Attributes | CBBE | Purchasing motivation |
|------|---------------------------------|------------|---------|-----------------------|
| 1. | <i>KMO</i> | 0.909 | 0.943 | 0.953 |
| 2. | <i>Bartlett's Test (Sig.)</i> | 0.000 | 0.000 | 0.000 |
| 3. | <i>Total Variance Explained</i> | 56.873% | 58.169% | 57.815% |

Appendix 6. Rotated component matrix for Attributes

| | 1 | 2 | 3 | 4 |
|------|-------|---|---|---|
| SCQ1 | 0.782 | | | |
| SCQ3 | 0.770 | | | |
| SCQ4 | 0.766 | | | |
| SCQ2 | 0.668 | | | |

| | | | | |
|------|-------|-------|-------|-------|
| SCQ5 | 0.561 | | | |
| SQS4 | | 0.518 | | |
| SQS1 | | 0.705 | | |
| SQS5 | | 0.611 | | |
| SQS6 | | 0.555 | | |
| SQS2 | | 0.533 | | |
| SQS3 | | 0.500 | | |
| SQI2 | | | 0.553 | |
| SQI4 | | | 0.899 | |
| SQI5 | | | 0.829 | |
| SQI3 | | | 0.780 | |
| SQP1 | | | | 0.767 |
| SQP3 | | | | 0.658 |
| SQP2 | | | | 0.544 |

Appendix 7. Rotated component matrix for CBBE Model

| | 1 | 2 | 3 | 4 |
|------|-------|-------|-------|-------|
| CPQ1 | 0.875 | | | |
| CPQ2 | 0.818 | | | |
| CPQ3 | 0.800 | | | |
| CBS3 | 0.605 | | | |
| CBS4 | 0.597 | | | |
| CBA2 | | 0.819 | | |
| CBA3 | | 0.753 | | |
| CBA1 | | 0.648 | | |
| CBS1 | | 0.593 | | |
| CBS2 | | 0.501 | | |
| CBL4 | | | 0.721 | |
| CBL3 | | | 0.688 | |
| CBL1 | | | 0.677 | |
| CBL2 | | | 0.640 | |
| CBL5 | | | 0.630 | |
| CBE1 | | | | 0.724 |
| CBE2 | | | | 0.562 |

| | | | | |
|------|--|--|--|-------|
| CBE3 | | | | 0.541 |
|------|--|--|--|-------|

Appendix 7. Rotated component matrix for Motivation

| | |
|------|-------|
| | |
| PMM4 | 0.826 |
| PMM3 | 0.821 |
| PMM5 | 0.818 |
| PMG6 | 0.811 |
| PMG4 | 0.794 |
| PMG5 | 0.794 |
| PMM1 | 0.794 |
| PME1 | 0.776 |
| PMM2 | 0.724 |
| PMG2 | 0.724 |
| PME3 | 0.723 |
| PME2 | 0.707 |
| PMG1 | 0.699 |
| PMG3 | 0.599 |

Appendix 8. Correlations

| | | Attributes | CBBE | Purchasing motivation |
|--|---------------------|------------|---------|-----------------------|
| Attributes | Pearson Correlation | 1 | 0.712** | 0.714** |
| | Sig. (2-tailed) | | 0.000 | 0.000 |
| | N | 243 | 243 | 243 |
| CBBE | Pearson Correlation | 0.712** | 1 | 0.755** |
| | Sig. (2-tailed) | 0.000 | | 0.000 |
| | N | 243 | 243 | 243 |
| Purchasing motivation | Pearson Correlation | 0.714** | 0.755** | 1 |
| | Sig. (2-tailed) | 0.000 | 0.000 | |
| | N | 243 | 243 | 243 |
| **. Correlation is significant at the 0.01 level (2-tailed). | | | | |

Appendix 9. Linear Regression for Hypothesis

| Hypothesis | Adj. R ² | Durbin -Watson | ANOVA sig. | Coefficients | | | Histogram | |
|------------|---------------------|-------------------|---------------|---------------------|-------|-------|-----------|--------------|
| | | | | Std. Coeff. Beta | Sig | VIF | Mean | Std. Dev. |
| 1 | 0.477 | 1.948 | 0.000 | 0.693 | 0.000 | 1.000 | -1.48E-15 | 0.998 |
| 2 | 0.572 | 1.875 | 0.000 | 0.757 | 0.000 | 1.000 | 3.47E-15 | 0.998 |
| 3 | 0.508 | 2.231 | 0.000 | 0.714 | 0.000 | 1.000 | 3.44E-15 | 0.998 |

Appendix 10. Introduction

The selection of ST25 rice as a souvenir aligns with the principles of sustainable tourism by encouraging responsible consumption. Tourists become ambassadors for sustainable practices by sharing their experience of purchasing sustainable souvenirs and creating awareness about the importance of supporting local, eco-friendly products (Walter, 2017). This ripple effect can inspire others to make conscious choices, contributing to the overall sustainability of Vietnam's tourism industry. As one of Vietnam's key economic sectors, tourism plays a pivotal role in supporting livelihoods and preserving the nation's rich cultural heritage (Vietnam Travel, 2021). However, sustainable tourism practices in Vietnam face challenges related to preserving ecosystem integrity, mitigating socioeconomic disparities, and ensuring the authenticity of local experiences. In this context, the utilization of ST25 rice as a sustainable tourism souvenir holds considerable promise. Sustainable tourism practices entail the promotion of environmentally friendly activities that conserve natural resources while supporting local economies. ST25 rice, a high-quality strain indigenous to Vietnam, presents a unique opportunity to enhance the sustainability of the tourism sector. Research on the utilization of ST25 rice as a souvenir for sustainable tourism in Vietnam holds significant theoretical significance. Firstly, it contributes to the field of sustainable tourism by exploring innovative approaches to align economic growth with environmental and socio-cultural preservation. By examining the potential of ST25 rice as a sustainable souvenir, researchers can shed light on the integration of local agricultural products into tourism value chains, fostering economic diversification and community resilience. Theoretical investigations can also delve into consumer behavior and preferences, providing insights into the demand for sustainable and authentic souvenirs (Su et al., 2017). Moreover, exploring the theoretical underpinnings of using ST25 rice as a souvenir can inform the development of conceptual frameworks and guidelines for sustainable tourism practices, benefiting not only Vietnam but also other destinations facing similar challenges. In addition to its theoretical significance, researching the utilization of ST25 rice as a souvenir for sustainable tourism in Vietnam carries practical implications. Practical research can provide empirical evidence on the economic, social, and environmental impacts of incorporating ST25 rice as a souvenir (Xu & McGehee, 2012). This data can inform policymakers, tourism authorities, and local communities about the potential benefits and challenges associated with implementing such initiatives. Practical research can also identify strategies for promoting and marketing ST25 rice as a sustainable souvenir, considering factors such as packaging, distribution channels, and pricing (Lin & Mao, 2015). Furthermore, practical investigations can assess the feasibility of integrating ST25 rice into existing tourism supply chains, considering issues such as quality control, authenticity, and scalability. Such research can guide stakeholders in making informed decisions and implementing sustainable tourism practices that maximize positive outcomes for local communities, tourists, and the environment (UNWTO, 2021). However, applying ST25 rice as a souvenir is very challenging. One of the key challenges in utilizing ST25 rice as a souvenir for sustainable tourism in Vietnam lies in effectively managing the supply chain (Nguyen et al., 2019). Ensuring a consistent and reliable supply of ST25 rice to meet the demand of tourists requires coordination among farmers, processors, distributors, and retailers. Issues such as quality control, packaging, and distribution logistics need to be addressed to maintain the authenticity and integrity of the product. Additionally, efforts must be made to minimize the environmental impact associated with packaging materials and transportation. Another challenge is creating awareness among tourists about the significance of ST25 rice as a sustainable souvenir. Many tourists

may be unfamiliar with the unique qualities of ST25 rice and its contribution to supporting local communities and preserving traditional agricultural practices. Educating and convincing consumers about the benefits of purchasing ST25 rice as a souvenir require effective communication and marketing strategies. Furthermore, generating sufficient demand for ST25 rice products may be challenging, as tourists may have diverse preferences and may not prioritize sustainable souvenirs in their purchasing decisions. Besides, maintaining cultural sensitivity and authenticity when using ST25 rice as a souvenir is crucial. It is important to ensure that the production and marketing of ST25 rice align with the cultural heritage of Vietnam and do not lead to commodification or cultural misappropriation. Respecting local traditions and involving communities in the decision-making process is essential to preserve the integrity of ST25 rice as a sustainable tourism souvenir. Striking a balance between meeting market demands and safeguarding cultural values requires careful planning and collaboration among stakeholders, including local communities, tourism authorities, and product developers.

The utilization of ST25 rice as a souvenir for sustainable tourism in Vietnam represents a novel approach that combines cultural preservation, economic development, and environmental sustainability. This innovative concept offers a unique and authentic experience for tourists while promoting responsible consumption and supporting local communities. The novelty of using ST25 rice as a souvenir lies in its ability to showcase the rich agricultural heritage of Vietnam and engage tourists in sustainable practices. ST25 rice, renowned for its exceptional taste and nutritional value, represents a distinct agro-biodiversity resource that reflects the country's cultural identity. By incorporating ST25 rice into the tourism value chain, visitors are allowed to learn about traditional agricultural practices, interact with local farmers, and appreciate the significance of sustainable food systems. Furthermore, the utilization of ST25 rice as a souvenir aligns with contemporary consumer trends that prioritize authentic and locally sourced products. With growing concerns about environmental sustainability, tourists are increasingly seeking meaningful experiences that minimize their ecological footprint and contribute positively to host communities. The inclusion of ST25 rice as a sustainable souvenir not only satisfies this demand but also highlights the importance of preserving traditional knowledge, protecting biodiversity, and supporting rural livelihoods. The novelty of using ST25 rice as a sustainable tourism souvenir in Vietnam extends beyond its cultural and environmental dimensions. It presents an opportunity for collaboration among various stakeholders, including farmers, local communities, government agencies, and tourism operators, fostering partnerships that promote sustainable development (Hong Linh, 2019). This innovative approach has the potential to create a paradigm shift in souvenir consumption, transforming it from a mere commercial transaction to a meaningful and impactful experience that fosters sustainability, cultural appreciation, and socio-economic well-being. Furthermore, addressing these challenges is imperative to successfully implement the utilization of ST25 rice as a sustainable tourism souvenir in Vietnam. Overcoming these obstacles requires a comprehensive approach involving collaboration, stakeholder engagement, and effective management strategies to ensure the sustainability and authenticity of the product.

Appendix 11. Literature reviews

Buying mementoes or souvenirs for vacations is a regular activity of tourists during their enjoying time. It may be one of the most common intentions of tourists, which can account for up to one-third of total travel expenses (Fairhurst et al., 2007). As such, developing souvenirs to augment tourism products and enhance the travel experience is crucial to all nations. Mementoes can be tangible and intangible to recall memories or experiences (Lin & Mao, 2015). According to Swanson & Timothy (2012), besides three types of souvenirs as totality, linking, and pilgrimage souvenirs, 'life souvenirs,' which represent food-related items and create nostalgic emotions, also play an essential role in keeping tourists returning to a particular destination. Two prominent souvenirs are symbolic reminders and tourist commodities (Swanson & Timothy, 2012). As such, referring to souvenirs in both aspects can help identify whether an item will or will not be a potential national memento.

In Vietnam, many regional specialties could be used as souvenirs. Besides fish sauce, black pepper, coffee, cakes, or cooked food (Pho, broken rice, vermicelli, or likewise), Vietnam has the power of rice. Vietnam has more than ten exotic rice types from the North to the South, which is endemic only in the nation (Do, 2021). In

recent years, ST25 has emerged as the top rice in Vietnam when it was awarded the best rice in the world in 2019 (Hong Linh, 2019). Since this rice is brand new compared to other types, its consumption is not significant, although it has been promoted broadly in media or social networks, which shows its potential to be attached to tourism (Chung & Han, 2017). According to Ho (2020) – the creator of ST25 Rice, the award of ST25 will change or even shift the rice standard from Thailand or Japan to Vietnam. It will represent Vietnamese types of rice to the world (Ho, 2020). Rice can be purchased originally (dried in a pack) or turned into different cuisines. Pho, noodles, steamed rice, steamed cakes, and others are Vietnamese delicacies for tourists who want to touch Vietnamese culture and heritage whenever travelling here. Still, they do not fit a space to be brought back to tourists' hometowns. Therefore, turning rice, i.e., ST25 Rice, into portable and affordable souvenirs is vital.

Furthermore, each Vietnamese person or an international tourist travelling to Vietnam has to be aware of or pay attention to Rice ST25 as the only Vietnamese brand to reserve Vietnamese Rice. Nonetheless, the issues of pattern protection are not solid or effective in Vietnam (Do, 2021). As such, any individual in Vietnam must join hands to ensure the sustainability of all Vietnamese Rice.

Appendix 12. Recommendations

ST25 Rice is an exotic and national product of Vietnam that a Vietnamese scientist invented. Therefore, saving its brand solely for Vietnam is a must. Each Vietnamese person and international tourist should have been popularized and aware that ST25 is originally from Vietnam and other patterns from other countries registered under ST25 Rice are illegal. To make sure that ST25 is protected not only by the domestic market but also on a global scale, it must be attached with portable and applicable products which could be purchased, shared, and spoken by many others on behalf. This word-of-mouth will frame a general idea of Vietnam's national product.

Furthermore, ST25 Rice, according to the perceptions of tourists, should be turned into a must-buy item in each tourist's to-do list whenever travelling to Vietnam. A healthy tourism system will benefit the food souvenir industry in diversification, domestic employees in production, and sustainable tourism development. The actions for those benefits will come with immediate steps, not only from the tourism authorities of Vietnam but also from each Vietnamese and international tourist via social, niche, and mass media and, of course, by retailers and companies.