

Dynamic capabilities for sustainability (DCSS) through sustainable tourism certification: A comparative case study between Taiwan and Thailand destinations

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INTRODUCTION

Extensive studies have been conducted covering diverse aspects related to the sustainable development of tourism. One of the areas of research interest is the adoption of sustainable tourism quality control tools, which are practical mechanisms for progressing sustainable tourism ideals (Lesar et al., 2020). These tools include products, processes, practices, or services that are voluntarily adopted by tourism businesses to promote sustainability. Considered stronger options of the sustainable tourism quality control tools, sustainable awards or certifications are originally developed to improve environmental performance by establishing indicators and implementation systems to manage environmental activities and to enhance environmental performance (Darnall & Sides, 2008). Sustainability certification is recognized as a practical tool to enhance the overall quality of the tourism sector by reducing the negative impacts of tourism development while also providing a competitive advantage (Font & Harris, 2004).

Another emerging topic of research is “Dynamic Capabilities for Sustainability” (DCsS), a concept first created by Amui et al. (2017) to examine how firms address sustainability issues, including green product development (Chen & Chang, 2013), sustainable business models (Bocken & Geradts, 2020), and sustainable supply chain management (Kähkönen et al., 2018). DCsS are among the most popular theoretical applications to explain capabilities needed to face the complex and evolving challenges stemming from the internalization of economic, environmental, and social issues as part of business strategy (Buzzao et al., 2021).

Despite growing attention to sustainable tourism certification, several research gaps remain. First, limited studies explicitly examine certification frameworks through the lens of dynamic capability theory, particularly in comparative destination contexts. Second, existing research often focuses on individual sustainability dimensions rather than integrated capability development processes. Third, empirical comparative studies between Asian tourism destinations remain underexplored, particularly regarding governance mechanisms and institutional adaptation strategies. Addressing these gaps is essential for understanding how certification programs function as strategic capability-building tools that enhance destination sustainability performance. A comparative study between Taiwan and Thailand offers valuable insights into how different institutional contexts shape the development and operationalization of DCsS. The objectives of this current study include:

(1) To assess how sustainable tourism certification programs enhance Dynamic Capabilities for Sustainability (DCsS) in certified destinations across Taiwan and Thailand.

(2) To evaluate the development of Dynamic Capabilities for Sustainability through the dimensions of sustainability-oriented innovation and stakeholder integration mechanisms within certified destinations.

METHOD

This study adopts a desk research approach where secondary data were collected in a reflexive thematic analysis. Two destinations, Hua Hin of Thailand and Northeast and Yilan Coast National Scenic Area (NEYC) of Taiwan were chosen as target destinations for the comparative case study. Both destinations have been certified by Green Destination (GD), a major international sustainable tourism certification system accredited by Global Sustainable Tourism Council, or GSTC (GSTC, 2018). Thailand and Taiwan share Asian cultural contexts and tourism market dynamic. However, two countries represent theoretical contrast in how domestic institutions shape dynamic capabilities for

sustainability. Hua Hin was selected as a critical case to examine Thailand's decentralized, stakeholder-inclusive approach to sustainable tourism governance. In contrast, Taiwan has adopted a more centralized approach. Under the guidance of its tourism administration, six of the nation's thirteen national scenic areas have been GD certified.

The next was to identify hospitality and tourism businesses within the destinations that fit the criteria: (1) they have received sustainable tourism certification in the last three years (2) online materials relevant to their sustainable practices available through websites, news articles, and reports. A total of 23 and 16 businesses were identified for NEYC and Hua Hin, respectively. Illustrative quotes from the online materials related to their sustainable practices were registered and categorized. This study adopts the approach (Figure.1) developed by Ortiz- Avram et al. (2024), where sustainable actions and practices can be evaluated based on the novelty degree of sustainability-oriented innovation (SOI) and the levels of stakeholder integration (SI). This framework allows the categorization of DCsS into four different types:

(1) Type 1/organization-level eco-efficiency: firms can optimize existing processes and products by assessing stakeholders' sustainability concerns.

(2) Type 2/organization-level transformation: firms can reliably develop new products and drive internal innovation by capturing sustainability-related concerns of stakeholders.

(3) Type 3/supply chain or network level eco-efficiency: firms can optimize the supply chain by acquiring knowledge about sustainability issues relevant to stakeholders and integrating them into decision-making processes.

(4) Type 4/systematic transformation: firms can develop new products and transform business models by integrating stakeholders' concerns.

Based on this framework, cases for NEYC and Hua Hin were then analyzed and compared.

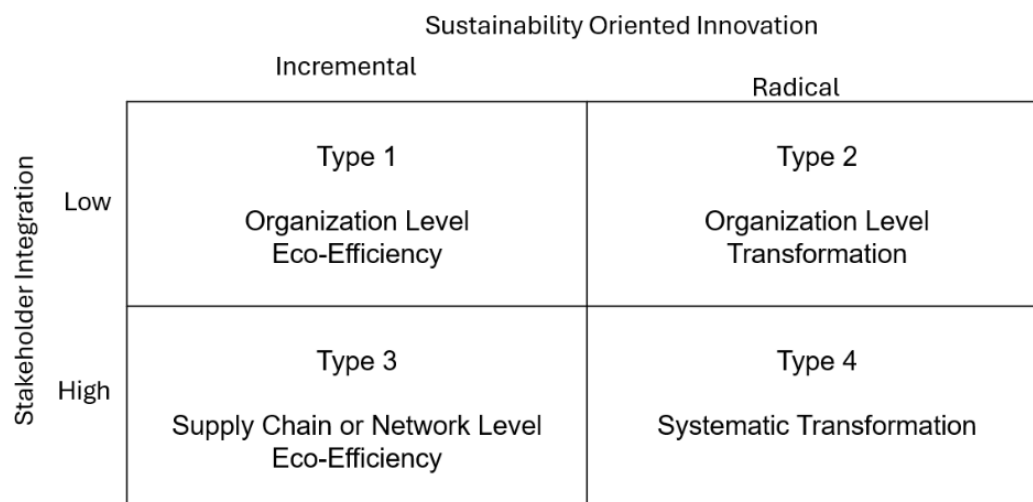


Figure 1. Typology of Dynamic Capabilities for Sustainability Source

(Adapted from Ortiz-Avram et al. (2024))

FINDINGS

Results are displayed in Table 1 to summarize the DCsS topology analysis based on certified tourism and hospitality cases in the two destinations. For NEYC of Taiwan, majority of businesses (52.2%) fall into Type 1, where organizations adopt moderate sustainable innovation with lower level of interaction with supply chain partners. Only three organizations (13.9%) are recognized as Type 4, representing a high degree of innovation and strong network transformation. However, higher level of stakeholder integration (4 out of 23) remains a challenge for organizations. Only one small social enterprise adopts moderate levels of sustainable practices while having strong interaction with supply chain partners. For Hua Hin of Thailand, its hospitality industry demonstrates moderate dynamic capabilities in

sustainability, characterized by widespread sensing and seizing capabilities but limitation of transformative capabilities. Particularly, Type 2 configurations (incremental innovation with high stakeholder integration) dominate with 11 cases (69%), suggesting that the industry excels at implementing standardized sustainability practices through external validation mechanisms. The predominance of incremental innovations (13 out of 16 cases, 81%) reveals a sector largely confined to operational adjustments rather than fundamental business model transformation.

For both destinations, sustainable actions and practices were further examined based on the three pillars, environmental, social/economic, and cultural sustainability. Results show that practices focused on the environmental aspects are the most prevalent. Energy and water conservation, waste reduction, recycling, are amongst the most common innovative practices. Regarding social and economic aspects, local purchase of supplies and food ingredients represent the most common sustainable practices mentioned. Meanwhile, cultural sustainability innovation is the least examined.

Table 1. Comparison of DCsS Typology between NEYC and Hua Hin

Type	Sustainability Oriented Innovation	Stakeholder Integration	NEYC	Hua Hin
1	Incremental	Low	52.2%	12.5%
2	Incremental	High	30.4%	68.8%
3	Radical	Low	4.3%	6.3%
4	Radical	High	13.9%	12.5%

CONCLUSION

Results from DCsS typology analysis of the two certified destinations reveal moderate dynamic capabilities because of sustainable innovation and practices. For NEYC of Taiwan, there are more cases of certified businesses, possibly due to its longer history of being a Green Destination-certified destination. However, most businesses demonstrate lower level of stakeholder integration across supply chain partners. Future efforts for NEYC tourism planners can be focused on encouraging tourism to collaborate with supply chain partners to address sustainability concerns and seize opportunities. Businesses in Hua Hin of Thailand demonstrate a higher degree of stakeholder integration, but most sustainable initiatives remain at an incremental level. Future strategies can be focused on sharing sustainable “best practices” to encourage businesses to adopt more radical changes. This comparative case study illuminates not only whether certification builds dynamic capabilities for sustainability, but under what conditions and through what mechanisms it does so most effectively. Findings offer practical insights for destination planners, managers, and policymakers seeking to operationalize sustainability beyond mere compliance toward genuine capability transformation.

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