INTERRELATIONSHIP OF NETWORKS, KNOWLEDGE, AND PERFORMANCE OF BUSINESSES THROUGH THE LENS OF COASTAL DESTINATION DEVELOPMENT

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Abstract

The sustainable future of coastal destination development is mainly reliant on performance of small and medium sized tourism enterprises (SMTEs) since they are the main catalyst of tourism growth. Given SMTEs’ operational sizes, the need to enhance their knowledge base through their networks to stay competitive is heightened. This research examines how the absorptive capacity (AC) affects the dynamic between formal and informal networks and business management performance of SMTEs. The study focuses on four sub-sectors in Terengganu, Malaysia: hotels and resorts, travel agencies, restaurants, and handicrafts. The study analysed survey data from 119 entrepreneurs using a hierarchical regression model. The results showed that the nexus between the use of formal networks and business management performance is significantly mediated by AC, while no significant relationships were found with the use of informal networks. The study emphasizes the importance of formal actors in promoting knowledge flows and enhancing coastal destination development and competitiveness.

Keywords: Formal network, informal network, knowledge transfer, absorption capacity, business management performance

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INTRODUCTION
Tourism has always been seen as a complete experience by visitors, even though it involves the participation of many different stakeholders (Mariani & Baggio, 2020; Solvoll et al., 2015). This requires collaboration between policymakers and various stakeholders to provide tourism products and services that contribute to successful destinations (Beltramo et al., 2021; Zee & Vanneste, 2015). In other words, the complementary activities implemented by the actors within a local co-producing system can be deemed as a representative of a destination (Elvekrok et al., 2022; Haugland et al., 2011). Such collaborative outlooks are illustrative of the tourism networks’ importance in the context of destination management studies (Nieves & Diaz-Meneses, 2018). In fact, analysis of previous research in the last two decades shows that scholars are increasingly focusing on tourism networks, particularly in relation to destination-based planning and management and organization (Azinuddin et al., 2022a). Furthermore, it is argued that there is still to be adequate empirical evidence on tourism networks to be synthesised by various stakeholders (Elvekrok et al., 2022).

The relationships between stakeholders in a tourist destination are complex, involving complementary products such as activities, accommodations, transport, and food, as well as supporting activities and infrastructure (Pavlovich, 2003). This can be attributed to the interdependency of actors within tourism system as they need to work together in producing a cohesive tourism products and services. In fact, the networks also enable destination stakeholders to be systematic, resilient and adaptable to any potential changes and crises (Hall et al., 2018). For this reason, such links and relations may bring success to the individual organizations, which in turn, contributes significantly to the sustainable future of a destination (Azinuddin et al., 2022b; Elvekrok et al., 2022).

Therefore, a prosperous destination that can be characterised by active networks of businesses may lead to generation of opportunities to the various tourism stakeholders (Merinero-Rodríguez & Pulido- Fernández, 2016; Aarstad et al., 2015). This explains the reason why the issues of network effects and interdependencies between relationship outcomes have become a main issue especially in the context of destination development (Sainaghi & Baggio, 2017). From this, it can be understood that networks are important for any destination development since small and medium-sized tourism enterprises (SMTEs) are considered as economic engines for any destination, and there is a pressing need to go beyond their boundaries and establish external relations to increase their performance (see Azinuddin et al., 2020; Elvekrok et al., 2022).

It is posited that the connection between these businesses facilitates the transfer and sharing of knowledge, driving innovation and competitiveness (see Presenza & Cipollina, 2010). Thus, networking activities are seen as key for
SMTEs to obtain knowledge and resources necessary for growth and sustainability (Hoang & Antocic, 2003; Morrison et al., 2004). Besides, contribution to destination development can be attributed to the network relations that bring new knowledge and enhancement of tourist satisfaction (Elvekrok et al., 2022). Therefore, the networks’ importance is heightened considering the smallness of their firms which led to the constraint of resources, knowledge and financial capital, subsequently hindering them to achieve optimal growth and influence the overall direction of a destination development (see Azinuddin et al., 2020).

For this reason, there is growing attention to tourism networks as a mechanism for legitimization, economic benefits, and social well-being (Romeiro & Costa, 2010; Shaw & Williams, 2009), given the importance of analysing networks in relation to destination-based planning and management (Mariani & Baggio, 2020). However, there is a scarcity of research on the absorptive capacity (AC) of actors within these networks (Azinuddin et al., 2020; Binder, 2018). This is due to tendencies of studies to focus on knowledge sharing within the structures of tourism organizations at the destination level (Presenza & Cipollina, 2010), rather than on individual firms and their formal and informal networks (Azinuddin et al., 2022a). Scholars have noted that entrepreneurs’ commitment to different types of networks varies, with differing preferences for formal networks (FNs) which includes associations, joint ventures, trading groups, and buyer-supplier agreements, or informal networks (INs) such as links among families, relatives, and friends (Grossman et al., 2012; Shaw & Williams, 2009).

Both networks are crucial for SMTEs and tourist destinations as their success is dependent on valuable external knowledge that can provide them the competitive edge. Despite the importance, there is insufficient of tourism network studies that provide empirical evidence on how the AC of SMTEs can bring positive impacts on their performance (Azinuddin et al., 2022a). Accordingly, this study aims to examine the mediating role of AC on different types of networks which can act as a catalyst for knowledge transfer, and how such dynamics shape the SMTEs performance and subsequently, destination development.

**LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT**

Establishment of relations that go beyond organizational boundaries are common practices amongst various tourism stakeholders within the realm of destination management (Elvekrok et al., 2022). Identified as “social ties”, such relations constitute the building block of a network that links wide spectrum of actors within tourism industry. There are many forms of these relations that are
universally identified as a network in tourism, which include partnerships, strategic alliances, coalitions, or cooperative agreements, all of which are commonly referred to as a "network" in tourism (Albrecht, 2013).

Accordingly, actors that form the tourism network usually comprised of managers, entrepreneurs, owners, organizations, associations, communities, or public agencies (Johanisson, 2000). Various motives of friendship, collaboration, market penetration, strategic alliances, research and development, or resource exchanges are the foundation behind the establishment of relations between the actors (Schoonjans et al., 2013; Watson, 2007). In fact, the need to enhance knowledge management within organizations has led to employment of network analysis by scholars and industry practitioners (Elvekrok et al., 2022). Since networking enables businesses to gain access to vital knowledge efficiently, this indicates the increasing needs to build and sustain network relations within the context of tourism industry (Azinuddin et al., 2022a).

**Networks, Absorptive Capacity and Business Management Performance**

Tripartite components of entrepreneurs, network structure and characteristics of their resources are often considered as main contributors to the success of knowledge transfer in a network (Bruderl & Preisendorfer, 1996; Jenssen & Greve, 2002). Size is considered as one of the network structure’s important dimensions as it enables formulation and reformulation of novel ideas and actions (Fernandez-Perez et al., 2013; Obstfeld, 2005). However, the size of a network does not always determine the extent to which entrepreneurs use their network's resources to improve the success of their business.

To fill this theoretical gap, trust and the frequency of business meetings with acquaintances and family members in an entrepreneur's network are important. Frequent communication with network actors can facilitate the transmission of crucial intelligence (Chua, 2001; Grant, 1996). From this dynamic, the importance of external relations is vital in the process of organizational learning as the attributes of social interactions are argued to be the central element of AC since it facilitates businesses to learn from others (Binder et al., 2018). Deemed as the descriptor of organizational routines and procedures by which an entity acquires, assimilate, transform and exploit knowledge to obtain and maintain competitive edge, AC is considered as the rational outcome of networking activities given its aim to leverage knowledge amongst the SMTEs’ entrepreneurs (see Azinuddin et al., 2020; Binder, 2018; Zahra & George, 2002).

In this sense, small businesses often rely on informal connections in the early stages of entrepreneurship. Centred on relations that are socially entrenched, these informal ties can provide resources at a lower cost as compared to the formal networks (Grant & Baden-Fuller, 2004; Zehrer & Raich, 2010). However,
it is believed that informal connections may not substantially impact business performance (Lechner et al., 2006). Instead, various forms of formal networks, namely joint ventures, long-term supplier-buyer partnerships, and other enduring ties are seen as more valuable in gaining access to valuable knowledge that is unavailable within internal resources (Shaw & Williams, 2009; Gulati et al., 2000).

Nonetheless, it is counterintuitive that entrepreneurs who prefer informal networking would continue to maintain this approach, even if it does not necessarily benefit their business growth and sustainability. Therefore, the hypotheses proposed are as follows:

\[ H1: FN \text{ influences } AC. \]
\[ H2: IN \text{ influence } AC. \]
\[ H3: FN \text{ influences business management performance.} \]
\[ H4: IN \text{ influences business management performance.} \]

**Mediating Effects of Absorptive Capacity on Networks and Business Management Performance**

Knowledge sharing through networks can enhance business performance by creating an extra-institutional space for innovation (McLeod et al., 2020; Fadeeva, 2004). To enhance the business management performance through values that are leveraged and transformed from the knowledge transfer, AC is vital for firms to enable this process (Flatten et al., 2011; Valentina & Passiante, 2009). For this reason, internal and external knowledge is considered important as it shapes the AC’s level within any organizations (Valentina & Passiante, 2009). This is especially relevant for tourism firms, which rely heavily on external knowledge, particularly from suppliers, due to the sector's demand for collaboration among stakeholders (Kale et al., 2020; King, et al., 2014).

Based on this premise, SMTEs rely on informal and formal networks of relatives, friends, suppliers, and customers for assistance or advice (Laursen & Salter, 2014; Mina et al., 2014). As a result, more research is needed to determine how network capabilities support the acquisition, retention, and application of skills (Azinuddin et al., 2022a; Hamel, 1991). Given the potential overlap of this concept with various formal and informal networks and their impact on business management performance, Thomas and Wood's (2014, 2015) empirical works on AC should be extended in light of the conceptual relationship between the processes of knowledge transfer and absorption (Czernek, 2014). Based on these arguments, three hypotheses were developed:
H6: AC mediates the relationship between FN and business management performance.
H7: AC mediates the relationship between IN and business management performance.

METHODOLOGY

The aim of this study is to evaluate the role of AC in mediating the relationship between formal networks (FN) and informal networks (IN) on business management performance among small and medium-sized tourism enterprises (SMTEs). The research framework and hypotheses are illustrated in Figure 1. The study employs a quantitative research design and a cross-sectional approach to collect data from SMTE entrepreneurs in two districts of Kuala Terengganu and Kuala Nerus in the state of Terengganu. Situated in the east coast of Peninsular Malaysia, Terengganu has the longest coastline in the country which makes the State as one of the main coastal destinations. In this sense, both districts were selected based on their significant tourism business activities and their geographic concentration of various public and private tourism establishments, making them a suitable coastal city-based destination to investigate SMTE networking.

The sample frame for the study consists of four different types of SMTEs, including hotels and resorts, travel agencies, handicrafts, and restaurants, manually constructed by referring to the list provided by Tourism Terengganu and TripAdvisor. The final list of qualified businesses population comprises 156 SMTEs, all of which were approached to participate in the study since the number is relatively small. Purposive sampling was used for data collection based on predetermined criteria, including small and medium-sized businesses with independent ownership managed by entrepreneurs in a personalized manner.

Figure 1: Research Framework
Source: Author
The survey questionnaire consists of four sections including; (1) the entrepreneurs' demographic profile, and sections that measure (2) FN and IN (Fernandez-Perez et al., 2013; McLeod, 2010), (3) AC (Thomas & Wood, 2014; 2015), and (4) business management performance (Flatten et al., 2011). For both FN and IN, all the items centred on three dimensions of size, trust and frequency of communication as suggested by scholars (see Bruderl & Preisendorfer, 1996; Fernandez-Perez et al., 2013). While the items of AC include four different dimensions of acquire, assimilate, transform and exploit. This is consistent with conceptualisation of AC by Thomas and Wood (2014; 2015). A 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree) was used to measure the constructs. Prior to actual data collection, a pilot study was conducted involving 20 SMTEs, which yielded an acceptable threshold value as per Hinton et al. (2004).

The raw data from the questionnaire were analysed using descriptive statistics and inferential statistics, including hierarchical linear and multiple regression analyses. This study will test the mediating effect of absorptive capacity by adhering to the recommended procedure by Baron and Kenny (1986). There are three steps to analyse the function of AC as a mediator, which comprise of: (1) the need to establish significant relationship between independent variable and dependent variable through the accounted latter’s variation by the former; (2) the need to verify the significant influence of mediator on dependent variable; (3) the significant relationship between independent and dependent variable becomes insignificant from previously significant outcomes after the dynamics within first and second steps are controlled.

RESULTS

Descriptive Statistic

Most of the SMTEs involved in this research (35.8%, n= 43) originates from the handicraft sector, then followed by restaurants with 34.2% (n= 41). Hotels and resorts constitute 19.2% of respondents with travel agencies the smallest group at 10.8% (n= 13). Furthermore, most of the respondents are male (50.8%, n=59), married (88.3%, n=106), high school leavers (53.3%, n=54%) and have no experience in any formal tourism business training (71.7%, n=86). In terms of their business attributes, most of them have been in business more than 25 years (30.8%, n=37) and have business plan (50.8%, n= 61).

Inferential Statistic

The hierarchical regression analysis shows that there is a significant relationship between FN and AC with the total variance explained by the overall regression model estimation was statistically significant at 20.1% ($R^2 = .201$), $F (9, 109) = 3.05$, $p < 0.01$. For the relation between the FN and business management...
performance, the regression model estimation was also statistically significant at 16.6% ($R^2 = .166$), $F (9, 109) = 2.41, p < 0.05$. According to Cohen (1988), the $R^2$ values indicate that the models have moderate goodness-of-fit, indicating that FN is quite effective in predicting the variance of AC and business management performance. This means that H1 and H3 is supported.

On the other hand, IN has no significant relationship with AC or business management performance. However, there is a significant relationship between AC and business management performance at 51.6% ($R^2 = .516$), $F (9, 109) = 12.93, p < 0.001$, with the final regression model achieving a satisfactory level of goodness-of-fit ($R^2 = .516, p < 0.001$) as per Cohen (1988). This indicates the support of H5 and not for H2, H4 and H7 since there is an insignificant impact between; (1) IN and AC and, (2) IN and business management performance.

Finally, the mediation testing confirms that the FN has a significant impact on AC, which in turn has a significant impact on business management performance (see Table 1). In the same vein, the statistical significance level between FN and business management performance decreases from significant ($p < 0.02$) to not significant ($p < .808$), suggesting that AC mediates the relationship between the two variables.

Table 1: Steps of mediation testing

<table>
<thead>
<tr>
<th>Step</th>
<th>Dependent Variable</th>
<th>Independent Variable</th>
<th>Model Regression, $R^2$</th>
<th>Model Statistical Significance</th>
<th>Regression Coefficient, $\hat{\beta}$</th>
<th>Regression Statistical Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Absorptive Capacity</td>
<td>Use of Formal Networks</td>
<td>.201**</td>
<td>.003**</td>
<td>.353***</td>
<td>.000***</td>
</tr>
<tr>
<td>2</td>
<td>Business Management</td>
<td>Absorptive Capacity</td>
<td>.516***</td>
<td>.000***</td>
<td>.656***</td>
<td>.000***</td>
</tr>
<tr>
<td>3</td>
<td>Business Management</td>
<td>Use of Formal Networks</td>
<td>.166*</td>
<td>.016*</td>
<td>.215*</td>
<td>.024*</td>
</tr>
<tr>
<td></td>
<td>Business Management</td>
<td>Use of Formal Networks</td>
<td>.517***</td>
<td>.000***</td>
<td>-.019</td>
<td>.662***</td>
</tr>
</tbody>
</table>

According to Baron and Kenny's (1986) theory, the regression model estimation that incorporates the mediator should render the initial significant effect of independent variable to shift into insignificant influence. Accordingly,
the study verifies that AC mediates the relationship between FN and business management performance, as there is a significant increase in the variance of business management performance explained from $R^2 = .166$ ($p < .05$) to $R^2 = .517$, ($p < .001$) when AC is added to the regression model with FN. This finding means H6 is supported which strengthens the argument for the strong mediation influence of AC on the relationship between FN and business management performance.

**DISCUSSION**

This study aimed to analyse the interrelationships between FN, IN, AC, and business management performance among four different types of small and medium-sized tourism enterprises (SMTEs) in Terengganu, a region with potential for tourism growth. The tourism industry requires communication between stakeholders to produce competitive products and services, making networking crucial for SMTEs (Azinuddin et al., 2022a). The outcomes of hierarchical multiple regression analyses showed that AC plays a significant mediating role in the relationship between FN and business management performance. This, to a certain extent is comparable to the finding of Binder (2018) as it is revealed that quality and size of the network relations positively influence the tourism businesses capacity to assimilate and exploit the knowledge to improve their innovation performance. Specifically, valuable knowledge generated from formal relations with intrinsic knowledge can be facilitated by AC, which leads to new business insights that improve business management, such as product or service development, operations, customer retention, and growth of SMTEs.

IN, on the other hand, did not have a significant relationship with business management performance. This finding supports the argument that businesses need to embrace external resources accessed from various forms of strategic formal relations such as joint collaborations or ventures, trainer and trainee relationships, key destination associations and others. The study’s results highlight the importance of AC in facilitating the transfer and sharing of knowledge from the formal networks to entrepreneurs and SMTEs in the tourism industry.

**CONCLUSION**

This study makes a significant contribution to applied research by analysing all variables through the insights of inter-sectoral lens, which advances the understanding of the role of networking in business management performance in the tourism industry. This is especially crucial since there is a scarcity of research on networks in Asian countries, and the selection of Terengganu as the research
setting provides a unique perspective. Despite this, the employment of purposive sampling calls for cautious treatment of the result since it cannot be generalised beyond this study population.

Considering the limitation, the outcomes of this research still can be used to formulate policies, design and improve training programs as well as organizational initiatives to cultivate collaborations and willingness to exchange knowledge among entrepreneurs in Terengganu. This is because the cultivation of collaboration and knowledge sharing can lead to overall business performance enhancement across Terengganu as a whole. Through networking activities in the shape of mentoring programs, workshops or trainings, SMTEs will be better equipped to adapt to rapid dynamics of market conditions and make full use of the knowledge available within their formal networks. From such networks, clusters should be developed at destination level in order to form groups of SMTEs with shared expertise and complementary knowledge to collaborate and foster competitiveness within the region. A well-connected and knowledge-driven network can assist the destination planners in formulating branding strategies as well as inform policy decisions and strategic allocation of resources. This would facilitate a creation of destination image that would differentiate it from other competitors and subsequently create a sustainable business environment which is based upon healthy collaboration and networking amongst tourism stakeholders.

Based on this premise, it is suggested that future empirical endeavours should focus on insights of public stakeholders on networking activities, extend the work into different contextual settings, and integrate other variables such as organizational loyalty and motivations for researchers and industries to analyse the fundamental dynamics between networks and AC. The integration of leadership theories into the interrelationship between networks and AC can also be considered as one of the crucial avenues which can be further investigated within the realm of tourism. All these variables are suggested given their traits which possess the predisposition to strategically contribute to business performance.

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