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The impact of knowledge management capability and intellectual capital on business performance in the mediation of innovation capability

Tam Minh Huynh¹, Ha Hong Nguyen^{2*}, Ky Nguyen³

¹Faculty of Business Administration, Nguyen Tat Thanh University, Vietnam; tamhm@ntt.edu.vn (T.M.H.). ²School Economics and Law, Tra Vinh University, Vietnam; hongha@tvu.edu.vn , honghaicbtv@yahoo.com.vn (H.H.N.). ³Faculty of Business Administration, Nguyen Tat Thanh University, Vietnam; nky@ntt.edu.vn (K.N.).

Abstract: The objective of this study was to examine the relationship between knowledge management capability, intellectual capital and business performance through the role of innovation capabilities in tourism companies in Ho Chi Minh City, Vietnam. Especially this study bricks of building determinants of business performance as well as knowledge management capability and intellectual capital for future consideration. The study was conducted by surveying 415 managers who are members of the Board of Directors who directly run tourism companies in Ho Chi Minh City and data was collected from October 2022 to May 2023. Inheriting the researches by Waseem Barkat, Riaz Ahmed, Loo-See Beh & Adeel Ahmed (2018); Ali Junaid Khan, Muhammad Sajid Tufail, Asad Ali (2021); & Aboobucker Ilmudeen, Yukun Bao, Ibraheem Mubarak Alharbi & Zubair Nawaz (2021), the authors used confirmatory factor analysis (CFA) to determine the most common observed variables of each factor. Research findings indicated that knowledge management capability, intellectual capital and innovation capability impacted business performance and confirmed the mediating role of innovation capability towards previous variables by the SEM model. From the above results, the study has suggested managerial implications to further improve the investment in developing knowledge management capability, intellectual capital elements and innovation capacity to achieve high business results in tourism enterprises in Ho Chi Minh City, Vietnam in the future.

Keywords: Business performance, Ho Chi Minh city, Intellectual capital, Knowledge management, Tourism enterprises, Viet Nam.

JEL Classification: L74, M11; M51; O31; P25.

1. Introduction

In developing countries, Tourism is considered an important industry in many countries. However, there seem to be new technology, social culture, and epidemic crises can all hurt the tourism industry as they cause travel restrictions, uncertainty and expenditure considerations, as well as impacting visitors' travel decisions and destination's capacity to serve visitors. In particular, studies have examined the relationship between infectious diseases and travel and how travel spreads these diseases. In spite of the COVID-19 pandemic has ended but their consequences have heavily impacted on global tourism industry (Hiep, 2021).

Rising from the end of 2019 and ending until today, COVID-19 has virtually delayed the tourism industry. According to the World Tourism Organization report (UNWTO, 2021), international tourist entrance in 2020 dropped by 74% compared to 2019, with a loss of 1 billion foreign tourist arrivals, a loss of USD 1.3 trillion in tourism exports, and an estimated loss in global GDP over USD 2 trillion, which put 100–120 million direct tourism jobs at risk and brought international tourism back to levels of the 1990s. Tourism grew by 4% in 2021, but remains far below pre-pandemic levels.

To achieve the goal of business performance of enterprises in the tourism industry, Nguyen Van It, Hoang Thi Chinh, & Tran Anh Minh (2019) believed that it is necessary to focus on investing in factors such as financial capacity, information technology, service capacity, marketing capacity, social responsibility, management capacity, and corporate culture, products, services and brand image; Those are the decisive factors to the business performance of tourism enterprises (Nguyen Van It, Hoang Thi Chinh, & Tran Anh Minh, 2019).

Although total revenue accounting for nearly 10% of the country's GDP in the Vietnam tourism industry but it has also been harshly impacted by the pandemic. Vietnam was most influenced by the pandemic in 2021, with the number of foreign visitors decreased 99.98% compared to 2019, domestic tourists dropped by 52.9%, and total receipts down 76.2% - approximate to about USD 24 billion. Therefore, the jobs and lives of people were concerned with the supply chains of tourism services and products, especially ethnic minorities, who are considered vulnerable to economic shocks.

Through literature review, it shows that the research trend on the impact of intangible resources and dynamic capabilities on business results are the two main trends and the number of studies is increasing and strategic management theory also mentions it. These two trends are the two main trends that are of much interest and application in strategic management literature; Therefore, this thesis approaches both trends at the same time.

Firstly, some researchers take a resource-based theory: Lin et al., 2009; Ahmad et al., 2012; Tan & Ndubisi, 2014; Cetindere et al., 2015; Xu et al., 2019; Asree et al., 2010; Acar & Acar, 2012; Mohammad et al., 2013; Lee & Lee, 2014; Yıldız et al., 2014; Weshah et al., 2019; Ahmad & Raja, 2021. Authors who support the resource-based view argue that business performance is mainly determined by internal resources that can be grouped into three categories including: physical resources, human resources and organizational resources (David & David, 2017). Physical resources include: raw materials and machinery; Human resources include all employees, training, knowledge, skills, and organizational resources may be tangible or resources may be intangible. However, tangible resources can be easily bought and sold so they are not important (David & David, 2017).

Second, approach based on dynamic capabilities. With this approach, there are some researchers: Li et al., 2006; Yang, 2012; Yuan, & Liu, 2013; Masadeh et al., 2016; Chahal et al., 2016; Imran et al., 2017; Ros et al., 2018; Elbaz, Agag & Alkathiri, 2018; Román et al., 2015. Authors who support dynamic capabilities theory believe that dynamic capabilities are the capabilities of an organization expressed through the intentional creation, expansion or modification of organizational resources and dynamic capabilities come in many forms (Helfat et al., 2007). Some dynamic capabilities allow firms to enter new businesses and expand old ones through internal growth, acquisitions, and strategic alliances (Helfat et al., 2007). Other capabilities help the company create new products and production processes (Helfat et al., 2007).

To face with such a situation, there are temporary policies that have been issued such as: tax support, loan support, etc. so that tourism enterprises can promptly choose the solutions to re-open and find out the suitable strategic in the current context (Hoa & Huy, 2021). However, Nunkoo et al (2020) thought that there achieved the goal of business performance of tourism enterprises to be necessary for focusing on developing in managerial capability. In the other hand, Muzenda (2014) believed that it needs to focus on entrepreneur attributes, firm characteristics, and external environmental factors for enhancing the business performance of tourism enterprises.

In short, there are still many conflicting views on setting the goals of business performance and the factors to affect the business performance of tourism companies that are still debated, so it is necessary to have following research for clarifying about the factors affecting business performance of tourism companies. Researches have not been found that focuses on grouping intangible resources and dynamic capabilities; especially in choosing factors: human capital, structural capital, relational capital, adaptive capacity, technological capacity, corporate reputation and classifying them as intangible resources and selecting factors: market orientation, customer relationship management, knowledge management and classify them into the group of dynamic capabilities and test the relationship between the group of intangible resources (human capital, structural capital, relational capital , adaptive capacity, technological capacity, corporate reputation) and groups of dynamic capabilities (market orientation, customer relationship management) and innovation on business results in companies. Tourism businesses in Ho Chi Minh City.

The objective of this study was to examine the relationship between knowledge management capability, intellectual capital and business performance through the role of innovation capabilities in tourism companies in Ho Chi Minh City, Vietnam. Which factors belonging to intangible resources and factors belonging to dynamic capabilities directly and indirectly impact the business results of tourism businesses in Ho Chi Minh City? and What management implications are appropriate for developing factors of intangible resources and factors of dynamic capabilities to increase innovation capacity and achieve business results of tourism enterprises in Ho Chi Minh city, Vietnam? The article structure includes 6 parts: Introduction, literature review, research methods, research results and discussion, conclusions and research limitations.

2. Literature Review

2.1. Resource-Based Theory (RBT) and Theory Dynamic Capabilities

The resource-based view confirms that internal resources are the more essential for a firm than external factors in sustaining and achieving competitive advantage (David & David, 2017). Resources include tangible and intangible assets and capabilities, i.e., the firm's capacity to effectively use its resources to obtain its purposes (Barney and Clark, 2009). RBT pays attention to idiosyncratic firm attributes (Eisenhardt & Martin, 2000). As a result, a company's business plan should be focused on its unique capabilities and resources. The importance of a firm's capabilities and resources and will support to drive superior performance if the firm can suitably react to its external environment (Barney & Clark, 2009). The firm's capabilities and resources are discriminated by their value, non-substitutability and inimitable nature (Eisenhardt & Martin, 2000). RBT has been applied in recent years by researchers to show the connection between firm resources and capabilities and performance (Feng et al., 2017).

In new economic conditions, the intangible resources keep an important role to the performance as well as in the existence of the firms (David & David, 2017). Therefore, the internal resources, especially the intangible ones, is vital in the resource theory (David & David, 2017). Besides, a capability is the ability to perform a particular task or activity. Operational capabilities help an organization to exist in the competitive environment (Helfat et al, 2007). A dynamic capability is an organization's competence to purposefully create, enhance, or change its resource base (Helfat et al, 2007). Dynamic capabilities include many forms. Some dynamic capabilities help firms to enroll new businesses and enhance old ones through acquisitions, strategic alliances, and internal growth (Helfat et al, 2007). Other capabilities enable a firm to develop new products and production processes (Helfat et al, 2007).

2.2. Intellectual Capital (IC) and Business Performance (BP).

Intellectual capital is considered as the knowledge-based view, which is itself formed on the resource-based view, on the theory of organizational theory and organizational learning theory (Cassol et al., 2016). The elements build up the intellectual capital can be divided into different components, such as, Structural Capital, Human Capital and Relational Capital (Cassol et al., 2016). Human capital is an important asset in an organization area. According to Barkat et al. (2018) this capital is a core asset for an organization and enhances the profit of a firm. Besides, Barkat et al. (2018) confirmed that the well-utilized knowledge, abilities of individuals, skills and provide positive and significant organizational performance. Structural capital supports improved organizational performance in a competitive environment which is the non-human reserve of knowledge (Barkat et al, 2018).

Moreover, it not only reforms the way an organization gathers, communicates knowledge and produces but also obtains a better position to lead to processes and better-quality products with suitable cost and deep insights leading to business performance. (Barkat et al, 2018). Suppliers and customers who are externally connected to firms are also strong drivers of performance (Barkat et al, 2018). Through relational capital, firms extend their relationship network and obtain new methods for performing tasks. By focusing relations with suppliers and customers, firms get more innovative from other experiences (Barkat et al, 2018). Based on above ideas the following hypothesis is suggested.

 H_i . A positive relationship exists between intellectual capital (human capital, structure capital, relation capital) and business performance

 H_4 . A positive relationship exists between intellectual capital (human capital, structure capital, relation capital) and innovation capability

 H_6 . Innovation capability mediates the relationship between intellectual capital (human capital, structure capital, relation capital) and business performance

2.3. Knowledge Management (KM) and Business Performance (BP).

Knowledge management is considered as the capacity of organizations to build the strategies to aim at managing knowledge and obtaining the knowledge from customers, professional networks, suppliers, application and transfer of knowledge (Putra et al., 2020). Knowledge sharing, acquisition and efforts to use knowledge enable understanding of market dynamics, helping to seize the changes and that firms can improve their service and products (Putra et al., 2020). Knowledge management impact on both performance and competitive advantage (Khan et al., 2021). Moreover, the influence of knowledge management on a company's financial success is beneficial (Khan et al., 2021). Managing information and knowledge within an organization to obtain its goals (Jiménez et al, 2021).

Obviously, KM can help to supervise by simplifying the adaptation, management, and implementation of sustainable practices (Jiménez et al, 2021). KM effects on both the innovation and the performance of companies in industry groups (Jiménez et al, 2021). Therefore, hypothesis is suggested

H². A positive relationship exists between knowledge management and business performance.

 H° . A positive relationship exists between knowledge management and innovation capability

2.4. Mediating Role of Innovation Capability (IC)

The organizational success is enhanced by the role of innovation capability. Firms with process and product innovation and exporting capability can obtained substantial performance (Barkat et al, 2018). Moreover, firms with process and product innovation can achieve their performance better than those without, and such process and product innovation improve organizational productivity and growth (Barkat et al, 2018). Human capital with diverse ideas, knowledge and skills can improve the product innovation. Barkat et al. (2018) explained that the human capital is not a usual process but rather takes years and is a basis of innovation capability. The innovation capability of a firm can be grown if develop the human capital (Barkat et al, 2018). Thus, a hypothesis is drawn to be empirically tested. Organizations can improve a good database, a good working space to reduce work hours, and platforms for interchange to discuss common organizational objectives (Barkat et al, 2018). Organizations with well-organized processes, databases, structures and support innovation (Barkat et al, 2018). The organization relations with external parties (suppliers and customers) are the main influence to obtain the competitive advantage (Barkat et al, 2018). Furthermore, firm will lead to the enhanced progress of superior product and process innovation if firms build the close relationship to customers and suppliers (Barkat et al, 2018). Several studies have revealed that generic knowledge management - such as knowledge storage, knowledge creation and sharing, application have positive impacts on a firm's innovation performance (Migdadi, 2020). Firms can utilize the application, sharing, storage, creation of knowledge to enhance innovation, as knowledge management has a positively and significantly effect to innovate the products, services and processes (Migdadi, 2020)

H₇. Innovation capability mediates the relationship between knowledge management and business performance.

2.5. The Relationship Between Innovation Capability (IC) and Business Performance (BP)

A firm's innovation capability is important characteristic that a firm needs and help growth and maintain competitive advantage (Ilmudeen et al, 2021). The firm's innovation capability is considered as a core asset for firm to create both the competitive position and performance (Ilmudeen et al, 2021). In literature, there is a wealth of evidence that innovation capability has relationship to firm performance (Ilmudeen et al, 2021).

The impact indirectly of human capital, structure capital and relation capital on business performance in the mediation of innovation capability have confirmed in the some of some of research journal (Barkat et al, 2018; Aljuboori et al, 2022). Besides, technology capability also impacts on business performance through the mediation of innovation capability (Feranita et al, 2017).

Furthermore, adaptive capability also effects on business performance in the mediation of innovation capability (Wiwoho et al, 2020). Finally, Vargas (2013) is confirmed that corporate reputation impacts indirectly on business performance through the mediation of innovation capability.

The impact indirectly of market orientation on business performance in the mediation of innovation capability have confirmed in literature (Huhtala et al, 2014). Besides, customer relationship management is also confirmed to impact on business performance through the mediation of innovation capability (Battor & Battor, 2010). Finally, there tested the impact indirectly of knowledge management on business performance in the mediation of innovation capability is also confirmed and significantly (Byukusenge & Munene, 2017). Therefore, hypothesis is suggested.

 H_{s} . A positive relationship exists between innovation capability and business performance



3. Research Methodology

3.1. Sample

Collecting the data to use for checking the measures and investigating the influence as well as the necessity of one model – intellectual capital, knowledge management, innovation capability – for business performance. There are sure to obtain a high reliability, in this research the author delivered 450 survey questionnaires in the Ho Chi Minh City, Vietnam. The valid answer sheets were 415, with a successful ratio of surveys was 92.22%. Key informant approach (a senior manager) was face-to-face interviews. Firstly, self-completed questionnaires are sent to email to leaders who operate the tourism enterprises in Ho Chi Minh City - Vietnam. The questionnaire was jogged on from April 04th, 2023 to July 12th, 2023.

3.2. Measures

Constructs examined were intellectual capital (human capital, structure capital, relation capital), knowledge management, innovation capability, business performance. Based on the work of Youndt and Snell (2020), five items were used to assess human capital. Structure capital is assessed by four items (Ulubeyli and Yorulmaz, 2020). Relation capital is evaluated by five items (Ulubeyli and Yorulmaz, 2020). Knowledge management is measured by five items (Khan et al., 2021). Innovation capability is assessed by four items (Liu, Chang and Fang, 2020). Finally, business performance is evaluated by five items (Rehman and Nazri, 2019). All scales were measured by a five-point Likert scale, anchored by 1: strongly disagree and 5: strongly agree. The origin of the questionnaire was cited in English through

research articles. Identifiable variables include: position, age, gender, qualifications, type of business, time of operation and business scales.

3.3. Data Analysis

In this study, the author used confirmatory factor analysis (CFA) to evaluate and reconfirmed reliability and validity of scales. Measure validation was carried out in two steps. The CFA model of intellectual capital (human capital, structure capital, relation capital), knowledge management, innovation capability and business performance were first evaluated before being combined with second-order constructs (intellectual capital) to form a final measurement model.

4. Results

4.1. Construct Validity of IC

Firstly, construct validity was assessed by using exploratory factor analysis (EFA); next, the author used confirmatory factor analysis (CFA) to evaluate (Hair et al., 2014). The base purpose of factor analysis throughout this research is to explore how various items within each construct interact with one another and to form scales for use in the subsequent linkage analysis. The EFA was used to extract the loadings of factors utilizing Promax rotation

The result of the variance percent, the eigenvalues and cumulative percent of variance are explained by factor analysis as shown in table 1; all principal components loadings for KMO are greater than 0.9, accomplishing the minimum loading criteria. KMO accounts for 63.866 percent of the total variance. The mean of each component of KMO has a higher value than 2 and implied that these CEOs tend to have an agreement with this variable at low level. Index of KMO = 0.905 > 0.5 and Sig (Bartlett test) = 0.00 < 0.05. Furthermore, the measurement scale also was evaluated by using Cronbach Alpha. Each component is recorded at least 0.870 that evaluation of respondents for each item is high agreement. Each item loading must be higher than 0.5 for adequate validity and 0.7 for precise validity due to convergent validity. Besides, the Average Variance Extracted (AVE) indexes of each factor must be higher than 0.5 to confirm the reliability and validity. The square root of the AVE for a component must be higher than the shared variance among all constructs in the conceptual framework due to discriminant validity. Table 2 shows the items for each component with Cronbach's alpha, Composite Reliability (CR), and AVE scored and results that all constructs are completely suitable for this study, with Cronbach Alpha values greater than 0.7; CR greater than 0.7 (Nunnally & Bernstein, 1994), and AVE significantly larger than 0.5 (Fornell & Bookstein, 1982). Furthermore, Table 2 displays the correlations among internal constructs to evaluate discriminant validity and confirms that all standardized factor loadings are greater than the recommended > 0.50 threshold (Gefen et al., 2000). Finally, convergent or discriminant invalidity issues are clearly. As a result, the data is completely suitable for further investigation.

| | Factor | | | | | | | | | |
|----------------|-------------|------------|---------|------------|-----------|----------|--|--|--|--|
| | Business | Knowledge | Human | Innovation | Structure | Relation | | | | |
| | performance | management | capital | capability | capital | capital | | | | |
| BP5 | 0.878 | | | | | | | | | |
| BP3 | 0.793 | | | | | | | | | |
| BP1 | 0.791 | | | | | | | | | |
| BP4 | 0.750 | | | | | | | | | |
| BP2 | 0.729 | | | | | | | | | |
| KM1 | | 0.792 | | | | | | | | |
| KM5 | | 0.768 | | | | | | | | |
| KM4 | | 0.742 | | | | | | | | |
| KM2 | | 0.740 | | | | | | | | |
| KM3 | | 0.728 | | | | | | | | |
| HC2 | | | 0.854 | | | | | | | |
| HC1 | | | 0.759 | | | | | | | |
| HC3 | | | 0.746 | | | | | | | |
| HC5 | | | 0.723 | | | | | | | |
| HC4 | | | 0.720 | | | | | | | |
| IC4 | | | | 0.923 | | | | | | |
| IC1 | | | | 0.822 | | | | | | |
| IC2 | | | | 0.791 | | | | | | |
| IC3 | | | | 0.790 | | | | | | |
| SC4 | | | | | 0.867 | | | | | |
| SC3 | | | | | 0.835 | | | | | |
| SC1 | | | | | 0.787 | | | | | |
| SC2 | | | | | 0.709 | | | | | |
| RC4 | | | | | | 0.845 | | | | |
| RC1 | | | | | | 0.832 | | | | |
| RC2 | | | | | | 0.774 | | | | |
| RC3 | | | | | | 0.698 | | | | |
| Eigenvalue | 8.342 | 2.884 | 2.563 | 2.342 | 1.981 | 1.257 | | | | |
| % of variance | 29.570 | 9.279 | 8.113 | 7.386 | 6.192 | 3.326 | | | | |
| Cumulative % | 29.570 | 38.849 | 46.962 | 54.348 | 60.539 | 63.866 | | | | |
| Mean | 2.30 | 3.12 | 2.88 | 2.32 | 2.05 | 2.35 | | | | |
| Cronbach alpha | 0.891 | 0.870 | 0.889 | 0.899 | 0.879 | 0.876 | | | | |

Table 1.Mean, reliability test, and exploratory factor analysis.

With EFA, all measured variables load on all factors creating a factor loading estimate for each variable on all factors. Simple constructs result when each measured variable loads heavily on only one factor and has smaller loadings on all other factors (e.g., loadings <.4). EFA becomes useful in identifying variables that have little communality with other variables under consideration. EFA factors are obtained from data runs, not from theory. This means running the software and letting the data determine the factor structure.

| | Alpha | CR | AVE | MSV | MaxR(H) | HC | SC | RC |
|----|-------|-------|-------|-------|---------|-------|-------|------|
| HC | 0.889 | 0.889 | 0.617 | 0.345 | 0.89 | 0.785 | | |
| SC | 0.879 | 0.881 | 0.65 | 0.278 | 0.882 | 0.527 | 0.806 | |
| RC | 0.876 | 0.876 | 0.639 | 0.345 | 0.877 | 0.587 | 0.230 | 0.80 |

Construct validity of intellectual capital.

CMIN/df=1.426; TLI=.989;CFI=.991; GFI=.968;RMSEA=.032

After examining the construct's validity, model fit was assessed using five incremental fit indices: CMIN/DF = 3, $TLI \ge 0.90$, $CFI \ge 0.90$, $GFI \ge 0.90$ and RMSEA = 0.08. (Hair et al., 2010).

Table 3.

Construct validity.

Table 2.

| | Mean | Alpha | CR | AVE | MSV | Max R(H) | BP | IC | KM | нс | SC | RC |
|----|------|-------|-------|-------|-------|-------------|-------|-------|-------|-------|-------|------|
| BP | 2.30 | 0.891 | 0.892 | 0.624 | 0.14 | 0.896 | 0.79 | | | | | |
| IC | 2.32 | 0.899 | 0.904 | 0.702 | 0.263 | 0.906 | 0.324 | 0.838 | | | | |
| KM | 3.12 | 0.870 | 0.870 | 0.573 | 0.145 | 0.871 | 0.298 | 0.365 | 0.757 | | | |
| HC | 2.88 | 0.889 | 0.889 | 0.617 | 0.345 | 0.89 | 0.375 | 0.513 | 0.380 | 0.785 | | |
| SC | 2.05 | 0.879 | 0.881 | 0.650 | 0.278 | 0.882 | 0.264 | 0.298 | 0.194 | 0.527 | 0.806 | |
| RC | 2.35 | 0.876 | 0.876 | 0.639 | 0.345 | 0.877 | 0.248 | 0.351 | 0.208 | 0.587 | 0.230 | 0.80 |

CMIN/df=1.454; TLI=.975;CFI=.978; GFI=.926;RMSEA=.033

Following that, the model obtained a good model fit with the following indexes: CMIN/DF = 1.426, TLI = 0.989, CFI = 0.991, GFI = 0.968 and RMSEA = 0.032; thus, strong support for confirmatory factor analysis of intellectual capital.

4.2. Structural Model Results

Table 3 shows the mean, and bivariate correlation, as well as Cronbach's and intellectual capital values for the HC, SC, RC, IC, KM and business performance constructs. IC has a mean value of 2.32, while BP has a mean value of 2.30. This result implied that these CEOs tend to agree with IC and BP but it's not strong agreement. The composite reliabilities (CR) ranged from 0.870 to 0.904, all of which was higher than the recommended cut-off value of 0.7. The average variance extracted (AVE) for whole of components was greater than 0.573, exceeding the 0.5 minimum threshold for convergent validity. Cronbach's alphas ranged from 0.870 to 0.899, exceeding the threshold of 0.7, showing good internal consistency and scale stability.

Table 3 shows that discriminant validity was achieved by comparing the square root of AVE to the correlations of the constructs. Because the correlations between the latent constructs' composite and all the other constructs were less than 0.7, the diagonal insertions of the matrix (in bold), representing the square root of AVEs, were all higher than the corresponding inter-construct correlations, indicating discriminant validity and constructs were sufficiently different from one another. Furthermore, discriminant validity was established by observing the cross-loadings and confirming that whole of indicator loadings were higher than their specific cross-loadings. The resulting measurement model fit well: CMIN/DF = 1.454, TLI = 0.975, CFI = 0.978, GFI = 0.926 and RMSEA = 0.033, and was thus deemed suitable for further structural equation.

| Hypothesis | Effect | Coefficient | P-value | Conclusion |
|------------|------------------------|-------------|----------------|------------|
| H1 | INT → BP | 0.306 | 0.000 | Supported |
| H2 | KM → BP | 0.226 | 0.010 | Supported |
| H3 | IC → BP | 0.123 | 0.035 | Supported |
| H4 | INT → IC | 0.587 | 0.000 | Supported |
| H5 | KM → IC | 0.319 | 0.000 | Supported |
| H6 | IC mediates INT and BP | 0.060 | 0.014 | Supported |
| H7 | IC mediates KM and BP | 0.026 | 0.012 | Supported |

Table 4.Structural model results.

The results support most of the hypotheses and are in line with previous formulation and subsequent testing of various hypotheses Table 4. The findings support majority of the empirical findings connected to the resource-based theory. Results shows that all hypothesis is accepted as detail.

5. Discussion

Firstly, intellectual capital (human capital, structure capital, relation capital) has a substantial and directly impact on business performance and innovation capability. Managers should invest on developing human capital to be undoubtedly important in a competitive business environment; especially there should organizes many training programs and performance appraisal of staff. Besides, managers would focus to improve internal working procedures, communication network and organizational structure. Moreover, managers should issue the customer caring policies and maintain always customer relationship; further-more there focus to maintain the close relationship with suppliers. On the other hand, knowledge management also impact on both business performance and innovation capability. So, there encourage to exchange knowledge between all of staff to establish knowledge management as a core organizational capacity when the organization's purpose is to enable the development of tourism enterprises. Knowledge distribution activities should carry out not only just inside firms but also between organizations and their business partners. Employees can utilize the knowledge sharing activities to create important solutions to react to the challenges.

Secondly, there improve innovation capability, tourism firms must focus to invest a process and product/service innovated culture that can motivate innovation behavior, pay attention to a concern for improvement, and develop internal collaboration with employees to spur on innovation to develop and obtain the business performance. This study suggests the advice on how tourism enterprises can use intellectual capital and its internal knowledge management base to improve innovation capacity and business performance.

6. Conclusions and Limitations

Firstly, This research has significant limitations that must be resolved. This research focused on three core contextual aspects influencing company outcome (e.g., intellectual capital, knowledge management and innovation capacity), which may be of use to a possible restriction to this study. Next research can select whether additional components affect the business performance. Second, because of time restrictions, each tourism enterprise is represented by a single respondent in this study. The paper is only carried out in Ho Chi Minh City, Vietnam; therefore, representativeness is not high. Next research can perform at other cities in Vietnam. Sample size in this research is only 415 respondents; there need to survey big data more than 415 respondent in the next research. Finally, this research only uses variables such as: intellectual capital, knowledge management and innovation capacity to test their effect to business performance. Next research should use another variable that this research doesn't refer yet. There need to use moderation approach to test for the research model in the future.

Secondly, second - order scale of dynamic capability (knowledge management) directly and significantly impacted on both innovation capability and corporate performance. So, managers of tourism firms need to build customer caring programs, consisting of customer conference, customer

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caring activities. In addition, managers of tourism firms should always inspect the market competitive context (market situation, customers' behavior, competitors' behavior, and strategy) to plan the strategy, facing with opponents and adjust for clients' behavior. Lastly, it was necessary for managers to distribute good and new ideas for all staffs; in addition, managers wrote and declare the reward policies toward performance enhancing ideas in order to gain business performance being better than before.

This study has significant shortcomings that must be addressed. This study concentrated on two crucial contextual aspects impacting company success (e.g., innovation capability, factors of intangible resource and dynamic capability), which might serve as a possible restriction to this study. Future research can determine whether additional elements impact diverse business performance. Second, due to time restrictions, each target business is represented by a single respondent in this study. Researchers typically seek response data from informants within companies when studying organizational phenomena. Using several informants from the same company enhances data quality and finding validity. In the future, efforts should be made to poll numerous informants from each answering organization. Finally, this study is tested solely in Ho Chi Minh City, Vietnam that it's not high to explain and generalize; therefore, there need to investigate another nation to enhance the explanation and generalization.

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References

- Acar, A. Z., & Acar, P. (2012). The effects of organizational culture and innovativeness on business performance in healthcare industry. *Procedia Social and Behavioral Sciences*, (58), 683 692. https://doi.org/10.1016/j.sbspro.2012.09.1046
- [2] Asree, S., Zain, M., & Razalli, M. R. (2010).Influence of leadership competency and organizational culture on responsiveness and performance of firms. *International Journal of Contemporary Hospitality Management*, 22(4), 500-516. DOI:10.1108/95961190980000613
- [3] Ahmad, M. F., et al. (2012). Relationship of TQM and Business Performance with Mediators of SPC, Lean Production and TPM. *Procedia Social and Behavioral Sciences*, (65), 186–191. https://doi.org/10.1016/j.sbspro.2012.11.109
- [4] Ahmad, M. R., & Raja, R. (2021). Employee Job Satisfaction and Business Performance: The Mediating Role of Organizational Commitment. Vision, 25(2), 168–179. DOI:10.1177/0972262920985949
- [5] Barkat, W., Beh, L. S., Ahmed, A., & Ahmed, R. (2018). Impact of intellectual capital on innovation capability and organizational performance: An empirical investigation. *Serbian Journal of Management*, 13(2), 365–379. DOI:10.5937/sjm13-16997
- [6] Barney, J. B., & Clark, D. N. (2009). *Resource-based theory: Creating and sustaining competitive advantage*. Oxford University Press.
- Cassol, A., Gonçalo, C. R., & Ruas, R. L. (2016). Redefining the relationship between intellectual capital and innovation: The mediating role of absorptive capacity. BAR - Brazilian Administration Review, 13(4), 1–26. DOI: 10.1590/1807-7692bar2016150067
- [8] Cetindere, A., Duran, C., & Yetisen, M. S. (2015). The effects of total quality management on the business performance: An application in the province of Kütahya. *Procedia Economics and Finance*, (23), 1376–1382. DOI:10.1016/S2212-5671(15)00366-4
- [9] Chahal, H., Jyoti, J., & Rani, A. (2016). The Effect of Perceived High-performance Human Resource Practices on Business Performance: Role of Organizational Learning. *Global Business Review*, (17), 107-132. DOI:10.1177/0972150916631193
- [10] David, F. r., & David, F. r. (2017). Strategic management concepts and cases. Pearson Education Limited.

- [11] Elbaz, A. M., Agag, G. M., & Alkathiri, N. A. (2018). How ability, motivation and opportunity influence travel agents performance: the moderating role of absorptive capacity. *Journal of Knowledge Management*, 22(1), 119–141. https://doi.org/10.1108/JKM-07-2017-0308
- [12] Eisenhardt, K. M., & Martin, J. A. (2000). Dynamic capabilities: What are they? *Strategic Management Journal*, 21(10–11), 1105–1121. Doi.org/10.1002/1097-0266(200010/11)21:10/11<1105::AID-SMJ133>3.0.CO;2-E
- [13] Feng, H., Morgan, N. A., & Rego, L. L. (2017). Firm capabilities and growth: The moderating role of market conditions. Journal of the Academy of Marketing Science, 45(1), 76–92. DOI 10.1007/s11747-016-0472-y
- [14]Fornell, C. and Bookstein, F.L. (1982) Two Structural Equation Models: LISREL and PLS Applied to Consumer Exit-
Voice Theory. Journal of Marketing Research, 19, 440-452.
https://doi.org/10.2307/3151718
- [15] Gefen, D., Straub, D., & Boudreau, M. (2000). Structural Equation Modeling and Regression: Guidelines for Research Practice. Communications of the Association for Information Systems, 4. https://doi.org/10.17705/1CAIS.00407
- [16] Hoa, N. T., & Huy, D. T. N. (2021). Vietnam Tourism Services Development During and after Covid 19 Pandemic: Situation and Solutions. *Revista Gestão Inovação e Tecnologias*, 11(3), 23–34.
- [17] Hiep, M. (2021, 10 4). thanhuytphcm.vn. Retrieved from https://thanhuytphcm.vn/: https://thanhuytphcm.vn/tintuc/tphcm-khoi-phuc-nganh-du-lich-trong-dieu-kien-dam-bao-an-toan-1491885311
- [18] Hiep, M. (2022, 02 08). *thanhuytphcm.vn*. Retrieved from https://thanhuytphcm.vn: https://thanhuytphcm.vn/tintuc/luong-khach-den-tham-quan-tai-tphcm-trong-dip-tet-dat-doanh-thu-khoang-300-ty-dong-1491890599
- [19] Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2014). *Multivariate Data Analysis*. Pearson New International Edition.
- [20] Helfat, C. E., Finkelstein, S., Mitchell, W., Peteraf, M. A., Singh, H., Teece, D. J., & Winter, S. G. (2007). Dynamic Capabilities Understanding Strategic Change In Organizations. *Blackwell Publishing Ltd.*
- [21] Ilmudeen, A., Bao, Y., Alharbi, I. M., & Zubair, N. (2021). Revisiting dynamic capability for organizations' innovation types: Does it matter for organizational performance in China? *European Journal of Innovation Management*, 24(2), 507– 532. https://doi.org/10.1108/EJIM-06-2019-0144.
- [22] Imran, M., Ilyas, M., & Fatima, T. (2017). Achieving Organizational Performance through Knowledge Management Capabilities: Mediating Role of Organizational Learning. *Pakistan Journal of Commerce and Social Sciences (PJCSS)*, 11(1), 106–125. http://hdl.handle.net/10419/188284
- [23] Jiménez, S. O., Osuna, B. A. L., Hernández, C. A. J., & García, A. R. G. (2021). Knowledge management in relation to innovation and its effect on the sustainability of Mexican tourism companies. *Sustainability (Switzerland)*, 13(24), 1–15. https://doi.org/10.3390/su132413790
- [24] Khan, A. J., Tufail, S., & Ali, A. (2021). Factors Affecting Performance of Small & Medium Enterprises: The Mediating Role of Knowledge Management. *Pakistan Journal of Humanities and Social Sciences*, 9(2), 197–209. doi.org/10.52131/pjhss.2021.0902.0129
- [25] Lin, C. H., Yang, H. L., & Liou, D. Y. (2009). The impact of corporate social responsibility on financial performance: Evidence from business in Taiwan. *Technology in Society*, 31(1), 56–63. doi.org/10.1016/j.techsoc.2008.10.004
- [26] Li, E. Y., Chen, J. S., & Huang, Y. H. (2006). A framework for investigating the impact of IT capability and organisational capability on firm performance in the late industrialising context. *International Journal of Technology Management*, 36(1), 209–229. DOI:10.1504/IJTM.2006.009969
- [27] Liu, C. H., Chang, A. Y. P., & Fang, Y. P. (2020). Network activities as critical sources of creating capability and competitive advantage: The mediating role of innovation capability and human capital. *Management Decision*, 58(3), 544– 568. DOI:10.1108/MD-08-2017-0733
- [28] Masadeh, R., Obeidat, B. Y., & Tarhini, A. (2016). A Jordanian empirical study of the associations among transformational leadership, transactional leadership, knowledge sharing, job performance, and firm performance: A structural equation modelling approach. *Journal of Management Development*, 35(5), 681–705. DOI:10.1108/JMD-09-2015-0134
- [29] Migdadi, M. M. (2020). Knowledge management, customer relationship management and innovation capabilities. Journal of Business and Industrial Marketing, 36(1), 111–124. https://doi.org/10.1108/JBIM-12-2019-0504
- [30] Muzenda, A. (2014). A Conceptual Model of the Determinants of Performance of Tourism Sector Small and Medium Enterprises (SMEs). International Journal of Business and Management Invention, 3(1), 30-35.
- [31] Nguyen, V. I., Hoang, T. C., & Tran, A. M. (2019). Impact of competitive factors on business results of tourism enterprises in Thua Thien Hue province. *Vietnam Trade and Industry Review*, 9, 254–259.
- [32] Nunnally, J.C. and Bernstein, I.H. (1994) The Assessment of Reliability. Psychometric Theory, 3, 248-292.
- [33] Putra, A. A. G. A. P., Wahyuni, N. M., Yasa, P. N. S., & Giantari, I. G. A. K. (2020). Examining the Linkage among Market Orientation, Learning Orientation and Innovation Performance: The Mediation Role of Knowledge Management. International Research Journal of Management, IT and Social Sciences, 7(6), 131–145. https://doi.org/10.21744/irjmis.v7n6.1023
- [34] Rehman, R. N., & Nazri, M. (2019). Information technology capabilities and SMES performance: an understanding of a multi-mediation model for the manufacturing sector. *Interdisciplinary Journal of Information, Knowledge, and Management*, 14, 253–276. DOI:10.28945/4429
- [35] Ros, S. C., Sánchez, D. L. G., & Romero, M. J. M. (2018). Absorptive capacity and its impact on innovation and performance: findings from SEM and fsQCA. *Review of Managerial Science*, 15(2), 235–249. DOI: 10.1007/s11846-018-0319-7
- [36] Román, J. A. M., et al. (2015). Innovativeness and business performances in tourism SMEs. Annals of Tourism Research,

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54, 118-135. DOI: 10.1016/j.annals.2015.07.004

- [37] Tan, Y. C., & Ndubisi, N. O. (2014). Evaluating supply chain relationship Quality, Organisational resources, technological innovation and enterprise performance in the Palm oil processing sector in Asia. *Journal of Business and Industrial Marketing*, 29(6), 487–498. DOI:10.1108/JBIM-07-2013-0147
- [38] Ulubeyli, S., & Yorulmaz, D. (2020). Intellectual capital based reputation for market internationalization: The case of engineering consultancy firms. *Journal of Intellectual Capital*, 21(1), 40–61. DOI:10.1108/JIC-01-2019-0010
- [39] UNWTO (2021). Tourism grows 4% in 2021 but remains far below pre-pandemic levels. https://www.unwto.org/news/tourism-grows-4-in-2021-but-remains-far-below-pre-pandemic-levels.
- [40] Weshah, G. A. A, Manasrah, E. A, & Qatawneh, M. A. (2019). Customer relationship management systems and organizational performance: Quantitative evidence from the Jordanian telecommunication industry. *Journal of Marketing Communications*, 25(8), 799–819. DOI:10.1080/13527266.2018.1449007
- [41] Xu, J., Shang, Y., Yu, W., & Liu, F. (2019). Intellectual capital, technological innovation and firm performance: Evidence from China's manufacturing sector. *Sustainability (Switzerland)*, *11*(19), 1–17. doi.org/10.3390/su11195328
- [42] Yang, C. C. (2012). Assessing the moderating effect of innovation capability on the relationship between logistics service capability and firm performance for ocean freight forwarders. *International Journal of Logistics Research and Applications*, 15(1), 53-69. DOI:10.1080/13675567.2012.669469
- [43] Youndt, M. A., & Snell, S. A. (2020). Human resource configurations, intellectual capital and Organizational performance. Journal of Managerial Issues, 32(1), 60-84. Link.gale.com/apps/doc/A625157639/AONE?u=anon~631564a0&sid=googleScholar&xid=b5c3ed61
- [44] Yıldız, S., Baştürk, F., & Boz, I. T. (2014). The Effect of Leadership and Innovativeness on Business Performance. *Procedia - Social and Behavioral Sciences, (150),* 785–793. doi.org/10.1016/j.sbspro.2014.09.064
- [45] Yuan, P., & Liu, Y. (2013). The Study of the Relationship between Interaction Orientation and Business Performance. Procedia Computer Science, (17), 1209–1215. DOI:10.1016/j.procs.2013.05.154