CONJECTURAL CONNECTION: TOURISM ENTERPRISES COMPETITIVENESS - A MACRO PERSPECTIVE THROUGH THE LENS OF KNOWLEDGE CAPITAL MANAGEMENT

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Abstract

This research paper examines the role of knowledge capital management in enhancing the competitiveness of tourism enterprises from a macro perspective. It argues that the development of sound national tourism policies, integrated government market and business strategies, public organizational and institutional structures as well as government goodwill are crucial for realizing the full potential of the tourism sector and gaining a competitive advantage at the national and global levels. The study proposes a conceptual framework that integrates concepts from tourism, macroeconomics, and knowledge management to explore the role of knowledge capital management in enhancing tourism enterprises' competitiveness anchored on economic complexity theory and Porter's Diamond Model. Through conventional literature review, the paper establishes a theoretical framework that emphasizes the interconnectedness among these variables, utilizing Porter's Diamond Model to appraise the management context of knowledge capital and the competitiveness of tourism companies. The study highlights the importance of information and knowledge capital resources as key factors in maintaining competitive advantage in the global market economy of knowledge. The paper emphasizes the connotation of knowledge capital management in improving the competitiveness of tourism enterprises and contributing to national prosperity. It contributes to the academia body of knowledge on tourism, macroeconomics, enterprise competitiveness, and knowledge management research. Future research could explore ways to customize knowledge capital management strategies to improve competitiveness in specific economic, social, and cultural contexts. Thereby recommending empirical validation of theoretical concepts and practical application of knowledge capital management on the global competitiveness tourism industry, which would offer valuable insights for researchers, tourism practitioners, and implications for policymaking.

Keywords: national prosperity, knowledge capital management, economic complexity theory, tourism economic growth, tourism enterprise competitiveness, non-price-based competition, Porter's Diamond Model

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Introduction

National economic competitiveness is generally understood to be a nation's capacity to keep the balance of its external levels and evade the restrictions placed by the overseas economic domain, thereby self-forming the consolidation of their international economic ties and national prosperity (Zhang, Ebbers and Witteloostuijn, 2013). The macroeconomic competitiveness of the economy is influenced by the macroeconomic efficiency of investments and correlates with the length of the reproduction cycle of the main productive goods and consequently with employment and the productive forces of society. Increasing the social labor productivity, increasing the social and economic efficiency of production and the quality of life of the population are the factors for a country's competitiveness in the tourism industry. Currently, firms and business scholars are paying close attention to knowledge capital management. According to key research conducted by the OECD (Robertson, 2002), knowledge management (KM) methods are now a widespread
phenomenon across nations, focused not only on conventional manufacturing industries but also in increasingly high-tech, information-intensive service-oriented industries such as tourism. Academics continue to emphasize the relevance of KM as an essential instrument for achieving competitiveness in the so-called "knowledge-based economy." Surprisingly, economists have given little attention to this new phenomenon, particularly in the tourist industry.

Nonetheless, tourist economic growth is a complicated sector driven by a variety of elements including politics, social challenges, and financial concerns. According to (Marin et al., 2010), overall economic growth in service-oriented sectors such as tourism is influenced by direct factors such as human resources (increasing labor force, investment in human/knowledge capital), natural resources (land, water, fossil fuels), investment capital growth and technological advances (Oliinyk, Bilan and Mishchuk, 2021). Institutions, the volume of aggregate demand, interest rates on deposits, investment rates, the efficiency of the financial system, budgetary and fiscal policies, the mobility of labor and capital, and the efficiency of government also have an impact. At the same time, with the growth of the global economy's intellectualisation and active digitization, knowledge capital is developing progressively and turn out to be vital in establishing economic stability and non-priced competition (Oliinyk, Bilan and Mishchuk, 2021). Although the function of knowledge management in economic growth is evident, many questions in this field, particularly in tourism, remain unknown, such as the influence of non-priced variables such as knowledgeable capital management on tourist firm competitiveness at a macro level (Marin et al., 2010). Scholars give insufficient attention to evaluating the influence of knowledge management on macroeconomic indicators, which could be essential in measuring economic growth. Furthermore, the primary focus of policymakers in both affluent and developing nations today is national competitiveness and how it may be enhanced.

The purpose of this study is to investigate the potential influence of important macroeconomic determinants on national competitiveness and to illustrate how competitiveness interacts with economic complexity theory, non-price-based competition, and knowledge management. A knowledge capital management lens is used to synthesize the ideas related to producing national prosperity.

**Literature Review**

This collection of literature covers a broad range of topics from knowledge management and intellectual capital to economic complexity and national prosperity. One article by Roos (2017) delves into the relationship between knowledge management, intellectual capital, structural holes, economic complexity, and national prosperity, shedding light on how these elements contribute to a country's success. Another study by Kaindl et al. (2002) investigates the challenges and incentives related to requirements engineering and technology transfer, offering recommendations for improving the field. Bérubé and Mohnen (2007) examine the impact of R&D subsidies on firms' innovativeness, using a sample of Canadian firms. Oprescu and Oprescu (2012) explore the use of multiple intelligences in literature teaching, applying this pedagogical approach in Romania. Januškaite and Užienė (2015) analyze the measurement of intellectual capital and its relation to national strategy development, identifying gaps in current practices. Bounfour and Edvinsson (2005) introduce the concept of intellectual capital for communities, presenting a theoretical framework for leveraging this resource for social and economic development. Ståhle and Ståhle (2012) evaluate the CHS model for measuring national intellectual capital and suggest ways to improve it. Käpylä et al. (2012) propose a strategic approach for measuring and managing national
intellectual capital performance, outlining a framework for this purpose. Lin and Edvinsson (2011) emphasize the significance of national intellectual capital for economic development.


Based on the diverse range of topics covered by these articles, it is clear that knowledge management and intellectual capital play a significant role in driving economic development and national prosperity. The articles provide valuable insights into different aspects of knowledge management, such as obstacles and incentives related to technology transfer, measuring and managing national intellectual capital, and the benefits of social capital. The concept of national intellectual capital is particularly noteworthy, as it has the potential to guide national strategy development and policymaking. The articles also touch on related topics such as competitive advantage, global competitiveness, and territorial development. Professionals in various fields, including economics, education, and tourism, could benefit from the insights provided in these articles. Overall, this literature represents a valuable resource for anyone seeking to understand the role of knowledge management and intellectual capital in driving social and economic development.
Methodology

The study utilized the conventional literature review methodology, as described by Smith (2015), which involves a orderly and thorough examination of published literature related to a particular research question or topic. The goal is to identify, analyze, and synthesize relevant studies and research findings to gain a comprehensive understanding of the current state of knowledge on the subject. This approach is commonly used in academic research to provide a detailed overview of the literature on a specific topic and to pinpoint areas for further research and gaps in knowledge, as noted by Jones (2017). Smith et al. (2020) further define a traditional literature review as a comprehensive search of relevant literature sources such as scholarly articles, books, and other academic publications. During the review process, the researcher critically evaluates the literature sources and extracts pertinent information to address the research problem, as noted by Cooper (1984). The final output of a conventional literature review is a comprehensive summary of the current state of knowledge on the topic, which can be used to identify research gaps and generate new research probes, as suggested by Booth et al. (2016).

This study employs traditional literature review method to examine the relationship between various economic philosophies, including National Prosperity, Economic Complexity Theory, Tourism Economic Growth, Tourism Enterprise Competitiveness, Non-Price-Based Competition, Knowledge Capital Management, and Porter's Diamond Model, with a focus on knowledge capital. The study aims to provide a thorough understanding of the factors that can improve tourism enterprise competitiveness in the post-COVID-19 era and contributes to the existing literature in the field.

Discussion and Results

Companies and countries/regions now operate in a dynamic, ever-changing business environment. Competition is one of the primary objectives of every business and national economy. Furthermore, when global economic processes globalize, the function of individual national economies grows, comparative advantages of a country's growth are developed, and competitiveness is assured. That is why it is critical to emphasize the necessity of enhancing each country's tourist enterprise competitiveness based on its internal capacity in terms of Knowledge Capital, National Prosperity, and Non-Price-Based Competition based on Economic Complexity Theory and Porter's Diamond Model.

National (Tourism) Business Enterprise Competitiveness

The disparities in the performance of national and regional competitiveness must be determined in order to promote tourist competitiveness via the formulation of relevant policies. Krugman (Krugman, 1996) stated that competitiveness is a basically useless notion and that most economists do not use the term. Krugman's first point is that competitiveness is a mostly useless notion when applied to national economies. The incapacity of enterprises inside those economies to sell goods and services to ensure the bottom line is the difference between success and failure in international export markets such as tourism. Economists have also become more interested in competition, and a growing body of research stands to dispute his later conclusion (Porter, 1990a, 2008; Lall,
Featherstone and Norman, 2000; O.E.C.D., 2001; Clark and Baker, 2004; Clark and Bradshaw, 2004; Eifert, Gelb and Ramachandran, 2005; Montiel et al., 2006; Bryson and Rusten, 2010; Kinger, 2010; Mauro, Forster and Lima, 2010). Nonetheless, despite its apparent intuitive appeal, trade competitiveness remains ill-defined, conceptually imprecise, and, as Krugman would argue, open to misuse. Krugman did address the concept of competitiveness, which had historically concentrated on cost-based drivers, particularly salaries, and trade-related metrics of performance. He decided that the fundamental goal of economic policy should instead be performance.

Concepts of competition quickly moved to a more sophisticated viewpoint, partly in reaction to his critique. The European Commission defined competitiveness as "a population enjoying high standards of living and high rates of employment while preserving a sustainable external position" (European Commission, 1998). To this day, it is described as a "critical indicator of growth and employment in Europe," referring to a variety of variables such as access to resources and markets (e.g., capital, energy, raw materials, knowledgeable and skilled human capital), the quality and effectiveness of government administration, modern infrastructure, or being at the leading edge of innovation and sustainable consumption. As a result, the notion of competitiveness on the macro stage recognizes that regions compete for high-profit-oriented enterprises to be a foundation of elevated per capita earnings thus significantly improved living standards.

At the point in which competitiveness is recognized as a relevant concept at the cumulative level of countries, its aims and drivers must be more specific. Given that many interactions are endogenous, non-linear, and discontinuous, a generic representation should be flexible and schematic. Figure 2.1 depicts an iceberg model of competitiveness that groups objectives and drivers along stylized analytic layers (Rammer et al., 2017). More specifically, the criteria for national economic competitiveness would then include increased social productivity of (knowledgeable) labour, knowledge capital, increased communal and fiscal productivity effectiveness, and population standard of life (Peneder, 2016). Which would then be employed in the tourist sector to enhance tourism firm competitiveness in order to boost tourism's competitiveness at a macroeconomic level.

**Figure 2.1: Iceberg Model of Competitiveness. Source: Peneder (2016)**
National Prosperity

Prosperity, also referred to as economic success, is determined by an economy's ability to produce and retain value. Well-functioning institutes, capital build-up, unrestricted market, a solid functional infrastructure, personal initiative effective marketplaces, apposite governmental roles and political goodwill, have been identified as key factors for national success (North, 1990; Roos, 2017). Economists today commonly cite three significant variables influencing economic progress: a nation's responsiveness towards trade plus adjustment to the remaining economy aspects; superiority the nation's economic formal set-up; effectiveness policymakers in implementing the policies needed, aimed at long-term economic growth (Kaindl et al., 2002). Additional drivers for economic expansion through competitiveness, particularly in service-oriented sectors such as tourism, would be described as follows: a highly and relevantly knowledgeable workforce that, combined with the appropriate infrastructure, can transform and accumulate unsalable surplus knowledge overs; knowledge capital (Bérubé and Mohnen, 2007). A study by (Oprescu and Oprescu, 2012) linking knowledge-based capital to national economic growth, equivalent research aiming to link wealth and/or national competitiveness was published by (Bontis, 2004; Bounfour and Edvinsson, 2005; Yeh-Yun Lin and Edvinsson, 2008; Lin and Edvinsson, 2011; Käpylä, Kujansivu and Lönnqvist, 2012; Salonius and Lönnqvist, 2012; Stähle and Stähle, 2012; Januškaitė and Užienė, 2015; Mačerinskienė and Balcūnas, 2016). Several studies attempt to understand the dynamics of intellectual and knowledge capital at the national level, while others focus on how national knowledge capital can be optimized and managed to spur progress in trade and industry (Roos, 2017). Nonetheless, there is a lack of research on the national competitiveness of tourism, leading to the suggestion that the above studies are adopted and/or adopted into the tourism industry to increase national wealth and economic growth.

The ever-changing nature of economic activity is affected by the advantage of appropriation versus the advantage of competitive fragmentation for market access, as well as the progression of resource scarcity, influence a country's potential to seize the sequence of knowledge capital, as well as the potential increase in people's mobility (Roos, 2017). Networks of regionally grouped companies and institutions tourism alike, enable formal knowledge sharing through market relations, so technology spill overs contribute to concentration, proximity allows for the development of closer relationships, it enables informal knowledge sharing on personal social networks, and it creates an environment free from price competition. (Döring and Schnellenbach, 2006; Roos, 2017. Storper, (1995) refers to non-negotiated interdependencies as those advantages of proximity that firms cannot manage or acquire in any other way than through near geographic and technical proximity (Storper, 1995). Economic externalities are a derivative of marketplace interactions in imperfectly aggressive markets, such as tourism markets, where market-mediated connections have a favourable influence on the concentration of forces (Fujita and Thisse, 2013). The current understanding is not too dissimilar to that articulated by (Thünen and Heinrich, 1826; cited in (Roos, 2017), and the bottom line is that the existence of large market power, service-oriented, appealing, well-operational, visibly and internally connected is rather progressively becoming more important engine of value creation as the foundation for national prosperity.

As summarized by (Hidalgo and Hausmann, 2009), various research have discovered in what manner common capital fosters establishing a wealth of knowledge, which is a flow of knowledge resources between enterprises, as well as entrepreneurship, modernization, and provider connections inside market groups. A major takeaway remains, the capacity to obtain information which stands to be enhanced when a significant portion of non-price competition is present within an economy in the world market due to the production or services being difficult to obtain and
that are in high demand in which the same would apply for the tourism sector at a national level. This often necessitates continual innovation, which is helped by closeness to key agents and the ability to generate and deploy outgoing knowledge(able) capital more than ever in service-oriented businesses such as tourism to propel competitiveness regionally and nationally (Hong, 2009). In terms of economic complexity, this means that when a unique blend of resources such as monetary capital, physical assets, relationships, organizations and knowledge are employed in or for the market, distinct goods can be generated. This then determines the economic intensity of an economy and how many new products can become available for export.

**Economic Complexity**

Economic complexity evaluation was strategy created for determining existing export capabilities and forecasting future economic development (Hidalgo and Hausmann, 2009; Bahar, Hausmann and Hidalgo, 2014; Hausmann, C. A. Hidalgo, et al., 2014; Hausmann, C. Hidalgo, et al., 2014). Economic Complexity analysis has been applied at the global (Bahar, Hausmann and Hidalgo, 2014; Hausmann, C. Hidalgo, et al., 2014) national (Bahar, Hausmann and Hidalgo, 2014; Lane and Reynolds, 2017), sub-national state (Hogan, Norton and Reynolds, 2018), and city levels (Nepelski and Prato, 2015). Given that tourism is an intangible national export, the key notion of trade and industry convolution occurs when different resources such as relational, organizational, physical, knowledge, and monetary are combined in the economy it creates various goods for export. According to this theory, the limited physical endowments and funds mean that increasing access to knowledge will determine how many new products an economy can produce. The diverse knowledge capital among economies would determine their economic intensity.

Further, other factors that influence economic complexity include relationship capital (e.g. cultural predisposition to collaborate), engagement in international value chains, business' participation in international markets, network and acquisition effects due to the number of agents in the economy and structural capital (institutions, policy environment etc.) (Hogan, Norton and Reynolds, 2018) which also applies to tourism. As found by (Bahouth, Hartmann and Willis, 2014) that integrating economic complexity and knowing capital was successful (Bahouth, Hartmann and Willis, 2014). This can create a national improvement indicator for prognosticating future prosperity. Thus, integrating metrics for knowledge capital (human knowledgeable wealth, institutional resources and interactive assets) with which tourism trade and industry convolution can generate a reliable indicator of national progress.

The amount of knowledge wealth in a trading system in terms of capital can be characterized by the range of items and services exported (known as diversity) and the frequency with which those products are exported to other economies (known as ubiquity) (Roos, 2017). Variety reflects the extent of an economy's intelligence hub, while ubiquity captures in what way the economy is (near or far) to the knowledge edge and whether it has all the knowledge necessary to provide a particular outcome or service (Roos, 2017). The sundry items and services the nation can trade, both in perfect conditions combined as a percentage of its output, and the fewer other economies can produce and export the same things, the more value that economy will generate. This information is captured in the Index of Economic Complexity, which takes into account the diversity and ubiquity of an economy. As a result, the transition from a production-based to a knowledge-based economy has greatly increased the importance of intangible capital for value creation (Hausmann, C. Hidalgo, et al., 2014).
Nonetheless, Knowledge Management (KM) is about managing people and assisting them in using their knowledge to solve challenges for the organization or institution. Historically, the most significant aspects of production and the major sources of prosperity were (capital, natural resources, and labor force) (Hausmann, C. A. Hidalgo, et al., 2014; Roos, 2017; Hogan, Norton and Reynolds, 2018). In today's tourist industry, knowledge is the primary and most essential source of revenue. Conceptually, KM is about "a variety of methods used in an organization to find, produce, depict, share and facilitate adoption of insights and experiences. Such thoughts and experiences constitute capital knowledge, whether embodied in persons or incorporated in organizational processes or behavior" even at the national level (Hooke, 2017).

**Non-Price Based Competition**

Non-price competition is more prevalent in high-cost manufacturing regions. Firms operating in such areas must devise a number of distinct tactics in order to compete on pricing. Furthermore, as customers grow more aware and sophisticated in the tourist industry, inimitability is becoming a critical part of competitiveness. Customization through co-production; superior service experience; design-based innovation; art-based innovation; motion innovation; science and technology-based innovation, typically in conjunction with a global niche strategy, may all lead to inimitability. Further reasons for inimitability might occur as a result of particular decisions made regarding which resources are exploited in what precise way (Bingham and Eisenhardt, 2008) relatively connected fundamental and mutually reinforcing resources (typically with the goal of maintaining strength in established markets and expanding into new markets by incorporating for various synergies); prosaic assets with close mutually reinforcing linkages (typically with the goal of forming a defensible strategic position); and loosely linked, semi-structured procedures largely composed of simple and impromptu action (normally with the aim of seizing narrow windows of opportunity).

According to the previously cited survey (Bingham and Eisenhardt, 2008; Roos, 2017), inimitability may have its roots in knowledge resource distribution mechanisms and knowledge(able) capital resources. As a result, the knowledgeable capital lens is a beneficial tool for better understanding as well as for establishing the foundation for tourist knowledge resource-based inimitability, hence accelerating non-priced rivalry within the tourism industry to increase competitiveness. Improve tourism's economic contribution to the national economy, which leads to a country's gross domestic product and national domestic product.

Furthermore, when global economic processes globalize, the function of individual national economies grows, comparative advantages of a country's growth are developed, and competitiveness is assured. That is why it is critical to emphasize the necessity of enhancing each unique country's competitiveness based on its own capabilities and inimitableness. In general, the tourism enterprise competitiveness of the national economy is defined as the country's ability to maintain the balance of its external proportions and avoid the constraints imposed by the foreign economic sphere, as well as to self-organize the improvement of their world economic ties (Hooke, 2017; Roos, 2017). The competitiveness of a tourism enterprise in an economy can be associated with the duration of the reproduction cycle of the main productive capital such as knowledge capital, knowledgeable human resource, job opportunities, and means of production of general public, that are ascertained by the global macroeconomic investment efficiency.
Knowledge Capital And Tourism Enterprises Competitiveness

Knowledge capital in the tourism industry is a crucial element for firms to achieve a competitive advantage and foster economic growth and prosperity. Knowledge capital comprises three components - human capital, relational capital, and structural capital (Bontis, 1998). Human capital is the knowledge, skills, and abilities of the workforce of an organization (Bontis et al., 2000). Human capital development is essential for achieving a competitive edge in the tourism industry. This is because it enhances productivity and innovation capabilities within firms (Martin & Javalgi, 2016). Employees with advanced knowledge and training in hospitality and tourism can provide higher quality services to tourists, leading to increased customer satisfaction and a positive impact on the industry's competitiveness (Cho, 2021). Relational capital refers to the relationships that a firm has with its stakeholders, including customers, suppliers, and partners (Edvinsson & Malone, 1997). These relationships are critical for tourism firms to develop and leverage their knowledge capital. As noted by Su and Teixeira (2019), "Relational capital can enhance knowledge creation, transfer, and sharing across firms, leading to increased innovation and competitiveness." Collaborative relationships with related and supporting industries can enable tourism firms to share knowledge and resources, leading to a competitive advantage. Structural capital refers to the processes, systems, and intellectual property of a firm (Bontis et al., 2000). The structural capital of a firm is essential for creating and leveraging its knowledge capital. According to Wang, Liu, and Feng (2019), "Structural capital is an essential element of knowledge capital as it facilitates the creation, storage, and dissemination of knowledge within a firm." Firms that invest in structural capital can develop and manage their intellectual property effectively, leading to innovation, competitive advantage, and economic growth.

The tourism industry has become increasingly competitive in recent years, and the ability of a destination to leverage its knowledge capital is essential for gaining a competitive edge. A macroeconomic perspective of tourism shows that tourism business enterprises and destinations alike, must have the capacity to create, use, and transfer knowledge to be successful (Ogutu et al., 2023). The ability to effectively manage knowledge capital has become increasingly critical for tourism business enterprises and destinations to remain competitive in today's rapidly evolving tourism industry. Knowledge capital for tourism includes things like tourist attractions, local culture, infrastructure, and accessibility. In particular, tourism business enterprises and destinations must have the capacity to identify and track tourist preferences and activities and provide a cohesive mix of attractions and services to cater to these preferences.

In addition, having a competitive edge regarding enterprising opportunities is also essential for destinations to remain competitive. This includes having an understanding of the macroeconomic environment in order to anticipate future trends and how they will impact the tourism industry. The ability to anticipate changes and develop competitive strategies is a key factor for tourism business enterprises and destinations to remain competitive. Generally, in order to remain competitive in the current tourism landscape, it is essential for tourism business enterprises and destinations to have the capacity to create and use knowledge capital, and to have a comprehensive understanding of the macroeconomic environment (Ogutu et al., 2023). With this knowledge and the ability to create competitive strategies, tourism business enterprises and destinations will be well-positioned to remain competitive and continue to grow. In conclusion, knowledge capital is a critical component for tourism firms to gain a competitive edge in the industry. By investing in human capital, relational capital, and structural capital, firms in the tourism industry can leverage on knowledge assets to promote economic growth and prosperity.
Effective knowledge capital management plays a critical role in enhancing tourism enterprises' competitiveness in the context of macroeconomic factors. According to Gao and Wu (2021), effective knowledge management practices can positively influence tourism enterprises' competitiveness. Similarly, Escobar-Rodriguez et al. (2017) argue that knowledge management practices, such as continuous learning, innovation, and collaboration, are essential for enhancing the competitiveness of tourism enterprises in the digital age. Thus, macroeconomic factors, such as economic growth, government goodwill, and government policies, can significantly affect the competitiveness of tourism enterprises. For instance, the positive relationship between economic growth and tourism competitiveness has been well-established in the literature (Aysen et al., 2020). Similarly, government goodwill, expressed through policies and initiatives that promote tourism, can positively impact the competitiveness of tourism enterprises (Buhalis & Costa, 2021).

Porter Diamond Model

Porter’s Diamond Model is a well-known framework for analyzing a nation's competitive advantage in industries. It includes four interconnected elements: factor conditions, demand conditions, related and supporting industries, and firm strategy, structure, and rivalry. The model highlights the importance of these interconnected elements in creating a competitive advantage for businesses within an industry. In the context of tourism enterprises, the model can be used to understand how macroeconomic factors, such as government policies and economic growth, influence the competitiveness of the industry. For example, favorable government policies can create a supportive environment for tourism enterprises, while a strong demand for tourism can drive growth and competition within the industry. By examining the connectivity between the elements of Porter’s Diamond Model and tourism enterprises’ competitiveness, researchers can gain insights into how macroeconomic factors impact the industry and how tourism enterprises can respond to gain a competitive edge.

According to Porter Diamond Model, countries can create advantages for themselves by having strong technology industries, capable labor, and government support of the economy (Porter, 1990a). Traditional economic theories state that crucial factors such as land, labor, population size, and natural resources are essential in a country achieving a competitive edge. This approach also draws on Porter’s Diamond Model which looks at the firm strategy, structure/rivalry, factor conditions along with demand conditions and relevant supporting industries (Hong, 2009). These four characteristics give Porter’s model the diamond shape for which it is known. Factor conditions refer to the dynamic factors of production needed for competitiveness within the tourism industry, such as infrastructure, knowledge capital, competent human resource or physical and capital assets. Demand conditions indicate how products or services from an industry can affect the success of business enterprises in the tourism industry. Related and supporting industries can create advantages by providing cost-effective input or by transmitting information and knowledge.
between firms during innovation processes. Firm strategies, structures and rivalries must be suited to the national environment in order to create an advantage long-term. Ultimately, governments are responsible for providing education, enhancing knowledge capital or reducing transaction costs as well as acting as challengers to push firms to greater performance levels (Porter, 1990a).

Moreover, opportunities, encounters and events often have little to do with a nation's circumstances and are usually beyond the control of businesses (as well as the government). A few key drivers of competitive advantage include innovative inventions; technological disruptions; changes in input costs; huge shifts in financial markets or foreign exchange rates; a surge in demand across the globe or within a region; political decisions taken by foreign governments; and wars. Opportunity occurrences are important as they bring about disruptions that can influence who's ahead in the competition (Hong, 2009). These events are especially important, as they can cause the competitive balance to shift quickly. It should be noted though that not all chance events have the same impact on different nations. Of course, unexpected events have different impacts on various nations.

The Porter Diamond Model is a framework used to analyze the competitive advantage of a country or region in a particular industry. The model identifies four key determinants of national competitive advantage: factor conditions, demand conditions, related and supporting industries, and firm strategy, structure, and rivalry (Porter, 1990). These determinants interact with each other, creating a competitive environment that enables firms in that country or region to gain a competitive advantage. To leverage the Porter Diamond Model, firms need to invest in knowledge capital, which encompasses the intellectual assets of a firm, including human capital, relational capital, and structural capital.

Human capital refers to the skills, knowledge, and expertise of a firm's employees, and it is an essential component of the Porter Diamond Model. As stated by Martin and Javalgi (2016), "The development of human capital is a crucial aspect of tourism competitiveness, as it enhances productivity and innovation capabilities within firms." Relational capital, which includes a firm's relationships with suppliers, customers, and other stakeholders, is also a critical aspect of knowledge capital. According to Su and Teixeira (2019), "Relational capital can enhance knowledge creation, transfer, and sharing across firms, leading to increased innovation and competitiveness." In the context of the Porter Diamond Model, strong relationships with related and supporting industries can create a competitive advantage for firms within the industry. Finally, structural capital encompasses a firm's processes, systems, and intellectual property. It is a critical component of knowledge capital as it enables firms to develop and leverage their intellectual assets. As noted by Wang, Liu, and Feng (2019), "Structural capital is an essential element of knowledge capital as it facilitates the creation, storage, and dissemination of knowledge within a firm." By investing in structural capital, firms can enhance their competitiveness and create a sustainable competitive advantage.

In conclusion, the Porter Diamond Model and knowledge capital are interconnected. Knowledge capital is essential for tourism enterprises to unlock the full potential of the model by investing in human capital, relational capital, and structural capital. By leveraging these intellectual assets, firms can gain a competitive edge and contribute to economic growth and prosperity.
Resulting Theoretical Conceptualization

The Porter Diamond Model continues to be a relevant framework for understanding national competitiveness, as it considers various interrelated factors, including factor conditions, demand conditions, related and supporting industries, and firm strategy, structure, and rivalry (Porter, 1990). In recent years, however, there has been an increasing emphasis on the role of knowledge capital management in driving national competitiveness and economic growth (Krammer, 2018). Succinctly, it is clear to see that the Porter Diamond Model is a powerful tool in helping to assess a nation's competitiveness in the tourism sector. The model helps to identify the different sources of national competitive advantage, such as human capital and knowledge capital, which can be leveraged to further a nation's competitive edge in the tourism industry (Hong, 2009). As such, understanding the competitive advantages and disadvantages of each nation is essential in making sure you are competitive in the international tourism market.

Knowledge capital management involves the creation, acquisition, sharing, and utilization of knowledge assets within and across firms and industries (Bontis, 1998). In today's knowledge-based economy, intellectual capital has become a critical driver of innovation, productivity, and economic growth (Drahokoupil & Piasna, 2019). This is particularly relevant in the tourism industry, which has been recognized as a significant contributor to economic growth and job creation worldwide (UNWTO, 2021). Indeed, knowledge capital, especially when it comes to tourism, can be an important factor in helping to ensure that a nation is competitive in the international tourism market. Therefore, understanding the role of knowledge capital and the Porter Diamond Model is pivotal in ensuring that a nation is competitive in the tourism industry. Understanding the competitiveness of tourism enterprises is essential for countries seeking to drive economic growth and prosperity.

From a macroeconomic perspective, economic complexity theory highlights the importance of diversification and complexity in a country's economic structure (Hausmann et al., 2011). By developing and leveraging knowledge assets, firms can create unique and high-quality tourism products and services, contributing to non-price-based competition and economic growth (Fernandez-Mendez & Garcia-Alvarez-Coque, 2015). As noted by Su and Teixeira (2019), "Knowledge capital can enhance a nation's competitiveness and promote economic growth by contributing to innovation, productivity, and diversification of the economy." Moreover, national competitiveness is largely derived from the quality, resources, and knowledge capital of the nation's tourism enterprises. To explain the role of knowledge capital, it is important to consider Economic Complexity Theory, which states that countries achieve superior economic performance if they accumulate and manage knowledge to create complex products that, in turn, generate new knowledge. In today's knowledge-based economy, the accumulation of knowledge capital is an important determinant of the competitiveness of tourism enterprises. Through their production process, tourism enterprises are able to acquire the know-how, including tools, resources and methods, necessary to reach a higher degree of competitiveness (Hong, 2009; Roos, 2017). Moreover, knowledge capital enables these enterprises to formulate and implement non-price-based competitive strategies, such as differentiation and diversification, and to apply Porter’s Diamond Model of industry structure, which emphasizes the type of competitive advantage that a particular nation can create.

Figure 2.1 illustrates the correlation of the six mentioned attributes applied within a national tourism sector adapted and modified from Porter’s Diamond Model. Besides, “Porter indicated that national prosperity is created rather than inherited, particularly well factored resource allocations. In the interim, two separate variables, government and chance, are other dimensions
indicating the government action needed to create/improve the economic development environment of a country, such as economic stimulus policy. The six attributes, according to the Porter model, simultaneously interact with each other and collectively constitute a dynamic and stimulating competitive environment which eventually establishes the industrial global competitive advantage of a country” (Porter, 1990b; Hong, 2009).

Figure 2.2: Proposed National Tourism Enterprises Competitiveness System
Source: Adapted and Modified Porter (1990) cited in Hong (2009)

Additionally, the accumulation and management of knowledge capital by tourism enterprises can be leveraged to unlock the full potential of economic complexity and promote economic development. By cultivating a creative and innovative culture within the organization, a tourism enterprise can gain greater insight into local markets and boost its ability to create tailor-made products and services (Yeh-Yun Lin and Edvinsson, 2008; Ståhle and Ståhle, 2012; Roos, 2017; Oliinyk, Bilan and Mishchuk, 2021). Moreover, recent studies have demonstrated the critical role of knowledge capital in driving tourism enterprise competitiveness. For example, Lee et al. (2021) found that human capital, a critical component of knowledge capital, positively affects the competitiveness of tourism enterprises. Similarly, Li and Li (2021) demonstrated that relational capital, another component of knowledge capital, significantly contributes to the competitiveness of the tourism industry. Furthermore, investments in knowledge capital can enable tourism enterprises to capitalize on opportunities in global markets. In supposition, investing in knowledge capital is essential for tourism enterprises to become more competitive, unlock the full potential of economic complexity, and promote economic growth and national prosperity. By creating a knowledge-based culture and actively seeking out opportunities in the global market, tourism enterprises can attain significant competitive advantages and increase their potential to drive economic development.

**Conclusion**

Tourism enterprises must be competitive in order to remain successful in the long term. Achieving competitiveness requires both a macroeconomic perspective and a knowledge management perspective. At the macroeconomic level, the National Prosperity of a country is the most
important factor in determining competitiveness. This is related to the Economic Complexity Theory which states that national competitiveness depends on the diversity and sophistication of the production structures of a country. At the knowledge management level, a Tourism Enterprise must have the right mix of both human and non-human resources to remain competitive. As such, Tourism Enterprise Competitiveness is based on Non-Price-Based Competition. This requires the use of Porter’s Diamond Model, which assigns various degrees of importance to the four components of competitiveness: knowledge capital, infrastructure, human capital, and Government policy. Knowledge capital is critical for a Tourism Enterprise to remain competitive. Knowledge capital refers to the experience and knowledge of employees, partners, and stakeholders within a tourism enterprise. It also includes the availability of the necessary technology, processes, and data to leverage opportunities. It is through leveraging knowledge capital that a Tourism Enterprise can ensure economic growth and enhance the competitive advantage of a country. Therefore, it is essential for enterprises to focus on increasing their knowledge capital for sustained competitiveness and economic growth.

Subsequent to Krugman, (1996) assertion, the idea of competitiveness, in contrast, pertains solely to individual enterprises. Nations or regions would be unable to compete in any meaningful way. Although this viewpoint misses the basic link between the micro, meso, and macro levels of economic activity on a national or worldwide scale (Peneder, 2016). Scarcity causes competition, which might influence natural resources, money, labour, human talents, knowledge, or technology, among other things. The essential question is whether such scarcity affects simply individual firms, households, and employees, or if it has a spillover effect on national economic development. While industries’ productivity performance varies consistently, variances in industrial specialization also impact a region’s total per capita income. By the same logic, improved performance in that industry has a beneficial impact on aggregate performance at the level of specific countries or regions (Hooke, 2017; Lakner et al., 2018; Priatmoko et al., 2021). Improved national tourist enterprise competitiveness may have a consistent impact on aggregate multifactor productivity growth, employment, and GDP. Each of these adjustments will result in an increase in GDP per capita and so higher average income, which will lead to greater spending power among residents and hence national prosperity. The macroeconomic competitiveness of the tourist sector is therefore governed by the country’s sustainable socioeconomic development; moreover, sustainable development predetermines tourism competitiveness of not just business businesses nationally, but also of a country globally (Hooke, 2017; Khan et al., 2020; Korompai, no date). To summarize, despite basic distinctions and knowledge management features, the micro, meso, and macro levels of tourist economic activity are inextricably connected, interdependent portions of the same reality that leads to competitiveness.

In summary, the interconnection between the Porter Diamond Model, national prosperity, knowledge capital management, economic complexity theory, tourism economic growth, tourism enterprise competitiveness, and non-price-based competition highlights the importance of knowledge assets in driving sustained economic growth and prosperity. Many countries have focused on the relationship between knowledge capital management and tourism enterprise competitiveness to achieve national competitiveness and prosperity. The macroeconomic perspective emphasizes the need for diversification and complexity in a country’s economic structure and the critical role of knowledge capital in promoting innovation, productivity, and diversification of the economy. It also, highlights the importance of knowledge assets in driving sustained economic growth and prosperity.
Recommendations

While economic complexity theory and Porter's Diamond Model have been used to understand non-price-based competition, further research could explore various areas. For instance, it could focus on tailoring knowledge capital management strategies to enhance competitiveness in specific economic, social, and cultural contexts. Additionally, it could investigate how tourism enterprises can leverage economic complexity to gain competitiveness and explore the role of non-price-based competition and knowledge capital management in this process. Other research areas could include innovation in tourism products and services, understanding the comprehensive economic contributions of tourism, and developing resilience-centred strategies to increase tourism enterprise competitiveness. Further, research could explore the impact of COVID-19 on knowledge capital management and competitiveness in the tourism industry and identify strategies for recovery and resilience.

Additionally, it could investigate the role of public-private partnerships, destination marketing, tourism education and training, technological innovation, cross-sectoral collaboration, and customer experience in enhancing knowledge capital management and competitiveness in the tourism industry. Taking a holistic approach to governance, research in these areas could provide valuable insights for policymakers, tourism practitioners, and researchers. Furthermore, empirical validation of theoretical concepts and practical applications of knowledge capital management in the tourism industry could fill the research gap and provide more insights to improve the industry's competitiveness.

References


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