

Transformational Leadership and Tour Operators' Competitiveness: The Importance of Collaborative Innovation and Market Orientation in China

Chen Xueyang, Noor Hazlina Ahmad
School of Management, Universiti Sains Malaysia
Email: xueyang.chen@student.usm.my

DOI Link: <http://dx.doi.org/10.6007/IJARBSS/v15-i8/26189>

Published Date: 20 August 2025

Abstract

This study examines how transformational leadership influences the competitiveness of Chinese tour operators through collaborative innovation, with market orientation as a moderating factor. Competitiveness, driven by effective innovation and strategic agility, is critical for survival in the dynamic tourism sector. Employing a quantitative survey of 200 top managers from tour operators in China's Yangtze River Delta, data analysis using Partial Least Squares Structural Equation Modeling (PLS-SEM) reveals that transformational leadership significantly enhances collaborative innovation, which in turn substantially boosts competitiveness. Additionally, high market orientation strengthens the positive relationship between collaborative innovation and competitiveness. These findings underscore the importance of transformational leadership and market-driven strategies in cultivating innovation to sustain competitive advantage, offering valuable insights for tour operators navigating rapidly evolving markets.

Keywords: Transformational Leadership, Tour Operators' Competitiveness, Collaborative Innovation, Market Orientation

Introduction

China's tourism industry has grown into one of the world's largest, significantly contributing to the nation's economic development (WTTC, 2020; Yang, Gu, & Cen, 2021). Tour operators in China play a critical intermediary role in designing and delivering travel experiences, connecting tourists with diverse services and destinations (Jiang, Bao, Xie, & Gao, 2016; Zhang, Song, & Huang, 2009). In recent years, this sector has faced rapidly evolving challenges, such as changing consumer preferences toward personalized and experiential travel (Amin, Thurasamy, Aldakhil, & Kaswuri, 2016; Buhalis & Sinarta, 2019), increased competition from both domestic and international firms (Jiang et al., 2016; Yang et al., 2021), and a wave of digital transformation reshaping service delivery processes (Law, Chan, &

Wang, 2018; Li, Robinson, & Oriade, 2017). The COVID-19 pandemic further underscored the need for agility and innovation, forcing operators to rapidly pivot to new offerings and markets amidst disruption (Hao, Xiao, & Chon, 2020; Gössling, Scott, & Hall, 2020). As the industry recovers and continues its digital transformation, the ability of tour operators to innovate and adapt has become essential for maintaining competitiveness in the dynamic tourism market (Pundziene & Geryba, 2023; Chin, Yusoff, Abas, & Ho, 2021).

Within organizational research, transformational leadership (TL) has long been identified as a leadership style that can drive innovation and organizational change (Bass & Avolio, 1994; Gumusluoglu & Ilsev, 2009). Transformational leaders inspire and motivate employees to exceed expectations, encouraging creativity and knowledge sharing that can lead to innovative solutions (Bass & Riggio, 2006; Mittal & Dhar, 2015). In the tourism context, a transformational leader (e.g., a tour operator's owner or manager) can articulate a compelling vision for innovation—such as developing unique tour packages or adopting new digital tools—and foster an environment where employees and partners collaborate to realize that vision (Elsetouhi, Hammad, Nagm, & Elbaz, 2018; Hoang, Hill, Lu, & Freeman, 2017). Prior studies have shown that transformational leadership positively influences innovation outcomes in organizations by promoting a culture of trust, learning, and creative problem-solving (Gumusluoglu & Ilsev, 2009; Jung, Chow, & Wu, 2003). For example, Gumusluoglu and Ilsev (2009) found that transformational leadership enhances employees' creativity and organizational innovation performance. By viewing leadership as a critical organizational resource, we can employ the Resource-Based View (RBV) lens to argue that effective leadership is an intangible asset that helps firms develop innovative capabilities that competitors find difficult to imitate (Barney, 1991; Helfat & Peteraf, 2003; Wernerfelt, 1984).

At the same time, collaborative innovation (CI)—defined as the joint development of new products, services, or processes with external partners—has emerged as a key strategy for firms in knowledge-intensive and service industries (Pundziene & Geryba, 2023; Un & Asakawa, 2015). In tourism, collaborative innovation can involve partnerships between tour operators and local communities, technology firms, accommodation providers, cultural institutions, or even competitors, to co-create unique offerings and share resources or knowledge (Chin, Yusoff, Abas, & Ho, 2021; Buhalis & Sinarta, 2019). Such collaboration allows tour operators to combine their internal strengths with external expertise, leading to innovations that improve service quality or operational efficiency (Hjalager, 2010; Rodríguez-Díaz & Espino-Rodríguez, 2016). This approach aligns with Dynamic Capabilities Theory (DCT), which emphasizes a firm's ability to integrate, build, and reconfigure internal and external competencies rapidly in response to changing environments (Teece, Pisano, & Shuen, 1997; Teece, 2007). Through collaborative innovation, tour operators can sense emerging market trends, seize opportunities by co-developing new services, and continuously reconfigure their resources and relationships for competitive advantage (Teece, 2014; Pundziene & Geryba, 2023). Collaborative innovation thus serves as a conduit through which leadership-driven initiatives translate into tangible improvements in service and performance (Hoang et al., 2017; Pundziene & Geryba, 2023). Recent work by Pundziene and Geryba (2023) conceptualizes collaborative innovation as a second-order construct encompassing broad partnership networks and deep relational collaboration, both of which significantly contribute to firm performance. For tour operators in China, leveraging extensive networks (partnerships with firms, academic institutions, etc.) and maintaining close, value-sharing

collaborations can be especially powerful for creating differentiated travel experiences that competitors cannot easily replicate (Jiang, Bao, Xie, & Gao, 2016; Zhang, Song, & Huang, 2009).

Tour operator competitiveness refers to the firm's ability to achieve superior performance relative to rivals, often manifested in market success, customer satisfaction, agility in recognizing and exploiting opportunities, and overall sustainability of the business (Jiang et al., 2016; Rodríguez-Díaz & Espino-Rodríguez, 2016). In this study, we focus on competitiveness as an outcome reflecting how well a tour operator can defeat main competitors, provide higher quality services, rapidly recognize market changes, and quickly respond to opportunities and customer demands (Jiang et al., 2016). This construct of competitiveness has been measured in prior research, such as by Jiang et al. (2016), who examined how strategic alliances affect firm competitiveness. We adapt their measures to the tour operator context. Competitive performance in tourism is multifaceted—it derives not only from cost or scale advantages, but increasingly from innovation, service quality, customer-centric offerings, and the ability to adapt to trends such as the rise of eco-tourism or digital booking platforms (Hjalager, 2010; Law, Chan, & Wang, 2018). As such, intangible resources like visionary leadership and the capability to innovate collaboratively are posited to be key drivers of competitiveness (Hjalager, 2010; Jiang et al., 2016; Wernerfelt, 1984).

Another crucial factor in this framework is a firm's market orientation (MO)—essentially, how well the organization understands and responds to customers' needs and market trends (Amin et al., 2016; Narver & Slater, 1990). Market orientation is often defined by three dimensions: customer orientation, competitor orientation, and inter-functional coordination (Kohli & Jaworski, 1990; Narver & Slater, 1990). A strong market orientation means the firm continually gathers market intelligence, disseminates it internally, and takes coordinated action to deliver superior value to customers and respond to competitor moves (Kohli & Jaworski, 1990). Market-oriented tour operators closely monitor tourist preferences, emerging travel trends, and competitor offerings, and they align their innovation activities accordingly (Amin et al., 2016; Chin et al., 2021). In theory, market orientation does not just have direct benefits; it can amplify the effectiveness of other resources and capabilities (Amin et al., 2016; Narver & Slater, 1990). According to DCT, a market-oriented firm is better at sensing opportunities and reconfiguring resources (like collaborative networks) to seize them (Teece, 2007; Teece et al., 1997). We therefore expect that market orientation will function as a moderator that enhances the positive effect of collaborative innovation on competitiveness. In practical terms, even if a tour operator engages in collaborative innovation, the competitive payoff will be greater when those innovation efforts are guided by a keen awareness of market needs (Narver & Slater, 1990; Amin et al., 2016). A market-oriented tour operator will choose the right collaboration partners and innovation projects—such as co-developing eco-friendly tours if customers are demanding sustainable travel options—that resonate with target customers, leading to bigger competitive gains (Chin et al., 2021). On the other hand, a low market orientation could mean misaligned innovation—partnerships and new services that don't meet customer needs, thus yielding less competitive advantage (Amin et al., 2016; Kohli & Jaworski, 1990).

Despite recognition of these factors, there remain gaps in understanding their interplay in the context of Chinese tour operators. Previous research on transformational leadership and

innovation has mostly been conducted in Western or manufacturing settings, with limited attention given to tourism SMEs in emerging markets (Elsetouhi, Hammad, Nagm, & Elbaz, 2018; Hoang, Hill, Lu, & Freeman, 2017; Mittal & Dhar, 2015). Collaborative innovation in tourism is a growing area of interest, but its mediating role between leadership and firm performance is still underexplored (Chin, Yusoff, Abas, & Ho, 2021; Marasco, De Martino, Magnotti, & Morvillo, 2018). Moreover, while market orientation is widely recognized to positively influence business performance, its specific role in moderating innovation outcomes within the tourism industry requires further examination (Amin, Thurasamy, Aldakhil, & Kaswuri, 2016; Chin et al., 2021; Line & Runyan, 2014). Addressing these gaps is particularly important given the unique operational context of Chinese tour operators. The Chinese business culture heavily emphasizes personal relationships (*guanxi*) and government ties, technology adoption is rapid but uneven across different regions and firms, and customer preferences are highly dynamic due to rapid societal changes and pervasive social media influence (Huang & Wilkinson, 2013; Li & Robinson, 2020; Yang, Ryan, & Zhang, 2013). Integrating Resource-Based View (RBV) and Dynamic Capabilities Theory (DCT) provides a robust theoretical foundation to explore how intangible resources—such as transformational leadership and market knowledge—and dynamic capabilities—including collaborative innovation and adaptability—jointly drive firm competitiveness in such a complex and rapidly changing environment (Barney, 1991; Helfat & Peteraf, 2003; Teece, 2007).

The rapid transformation of China's tourism industry—driven by digital disruption, shifting consumer preferences, and heightened competition—presents both opportunities and challenges for tour operators. While transformational leadership, collaborative innovation, and market orientation have been individually linked to firm success, little is known about how these elements interact to shape competitiveness in emerging market tourism contexts. This gap is critical because the ability to integrate leadership vision, collaborative networks, and market-driven strategies can determine whether firms thrive or fall behind in fast-changing environments.

This study makes three key contributions. First, it introduces a mediated-moderation framework that simultaneously positions collaborative innovation as a mediator and market orientation as a moderator, offering a nuanced understanding of how transformational leadership translates into competitive advantage. Second, it extends the Resource-Based View (RBV) by conceptualizing transformational leadership as a unique intangible resource that indirectly enhances competitiveness through innovation capabilities. Third, it integrates Dynamic Capabilities Theory (DCT) to show how market orientation strengthens the innovation–competitiveness link, providing actionable insights for tourism managers on aligning innovation initiatives with market needs. Together, these contributions advance theory and provide practical guidance for sustaining competitiveness in the dynamic tourism sector.

Literature Review and Hypotheses

Transformational Leadership and Collaborative Innovation

Transformational leadership (TL) is characterized by a leader's ability to inspire and intellectually stimulate followers, motivating them to achieve beyond typical expectations (Bass, 1985; Bass & Riggio, 2006). Transformational leaders demonstrate behaviors such as idealized influence, inspirational motivation, intellectual stimulation, and individualized

consideration—collectively known as the “Four I’s”—which significantly enhance team performance and innovation (Bass & Avolio, 1994; Gumusluoglu & Ilsev, 2009). By articulating a clear vision and demonstrating passion for new ideas, transformational leaders encourage employees to think creatively and challenge existing practices (Mittal & Dhar, 2015; Jung, Chow, & Wu, 2003). In the context of tour operators, a transformational leader may inspire the team to co-create innovative tour packages offering unique cultural experiences or adopt advanced digital technologies to enhance customer service (Elsetouhi, Hammad, Nagm, & Elbaz, 2018; Hoang, Hill, Lu, & Freeman, 2017). These leaders cultivate trust and empowerment within their teams, creating an environment in which employees feel valued, are willing to share novel ideas, and take calculated risks in developing new services (Gumusluoglu & Ilsev, 2009; Jung et al., 2003).

Research across various industries consistently supports the positive relationship between transformational leadership and innovation. Bass and Avolio (1994) emphasized that transformational leaders instill a sense of purpose, promoting an organizational climate conducive to the generation and exchange of innovative ideas. Gumusluoglu and Ilsev (2009) provided empirical evidence demonstrating that transformational leadership positively influences both individual creativity and organizational innovation performance in Turkish SMEs. This influence is driven by transformational leaders’ ability to elevate followers’ intrinsic motivation, enhance creative problem-solving, and foster a collective commitment to organizational innovation goals (Bass & Riggio, 2006; Mittal & Dhar, 2015). By providing intellectual stimulation—encouraging employees to approach problems innovatively—and individualized consideration—mentoring and addressing personal employee needs—transformational leaders create an atmosphere conducive to effective collaborative innovation, essential for creativity and knowledge-sharing projects (Mittal & Dhar, 2015; Jung et al., 2003).

From a Resource-Based View (RBV) perspective, transformational leadership can be conceptualized as a valuable, rare, and inimitable resource, representing a form of unique human capital embedded within a firm’s management structure (Barney, 1991; Wernerfelt, 1984). Leadership capabilities, such as vision, charisma, and effective interpersonal relationships, are not easily acquired externally, providing firms with sustained competitive advantages (Helfat & Peteraf, 2003; Barney, 1991). Transformational leadership fosters collaborative innovation—a complex organizational capability—by initiating external partnerships (e.g., with technology providers, local community stakeholders, and other tour operators) and nurturing an internal culture open to external knowledge and new ideas (Chin, Yusoff, Abas, & Ho, 2021; Marasco, De Martino, Magnotti, & Morvillo, 2018). By promoting openness, inclusivity, and active engagement with external stakeholders, transformational leaders lower internal organizational barriers, thereby facilitating successful collaborative innovation efforts (Marasco et al., 2018; Rodríguez-Díaz & Espino-Rodríguez, 2016).

Dynamic Capabilities Theory (DCT) further clarifies the strategic role transformational leadership plays in organizational adaptability and innovation. Transformational leaders excel in sensing and seizing emerging opportunities within the business environment—for instance, recognizing increasing customer demand for eco-friendly tourism experiences—and effectively mobilizing organizational resources toward innovative initiatives and strategic collaborations (Teece, 2007, 2014; Teece, Pisano, & Shuen, 1997). By aligning internal

capabilities (employee skills and organizational knowledge) with external expertise (partnerships, new technology providers, or environmental organizations), transformational leaders utilize the sensing, seizing, and reconfiguring dynamic capabilities to achieve sustained competitive advantage (Teece, 2007; Helfat & Peteraf, 2003).

Tourism research has increasingly recognized the importance of leadership in fostering innovation. Yilmaz et al. (2023) and Hoang et al. (2017), as cited in prior studies, highlight that transformational leadership in tourism organizations substantially influences innovative collaboration and knowledge-sharing activities. Transformational leaders' ability to build social capital—through cultivating and maintaining strong relationships and trust-based networks—enhances collaboration both internally and externally (Hoang et al., 2017; Elsetouhi et al., 2018). Although our study primarily focuses on collaborative innovation outcomes, it is noteworthy that transformational leaders' networking behaviors indirectly facilitate effective inter-firm collaboration, representing a critical pathway through which leadership impacts innovation (Marasco et al., 2018; Yilmaz et al., 2023).

Drawing upon these theoretical and empirical insights, we propose a positive relationship between transformational leadership and collaborative innovation within tour operators:

H1: Transformational leadership has a significant positive impact on collaborative innovation among tour operators in China.

Collaborative Innovation

Collaborative innovation (CI) refers to the process through which firms work jointly with external partners—such as suppliers, customers, competitors, research institutions, or other stakeholders—to develop new or improved offerings and solutions (Marasco, De Martino, Magnotti, & Morvillo, 2018; Pundziene & Geryba, 2023). Unlike purely internal R&D efforts, collaborative innovation leverages external knowledge and complementary resources, allowing firms to overcome internal resource limitations (Chin, Yusoff, Abas, & Ho, 2021; Rodríguez-Díaz & Espino-Rodríguez, 2016). In tourism, collaborative innovation might involve a tour operator co-developing a new itinerary with a local community to deliver authentic cultural experiences or partnering with a technology startup to build an enhanced booking platform (Buhalis & Sinarta, 2019; Marasco et al., 2018). Such collaborations enable tour operators to access external expertise, share risks and innovation costs, and accelerate organizational learning—often resulting in more diverse and customer-tailored innovations compared to internally developed solutions (Bouncken & Kraus, 2013; Rodríguez-Díaz & Espino-Rodríguez, 2016).

Collaborative innovation directly enhances a tour operator's competitiveness. Competitiveness, as defined here, refers to a firm's ability to surpass rivals in key performance dimensions such as service quality, responsiveness to market changes, and overall market success (Jiang, Bao, Xie, & Gao, 2016; Rodríguez-Díaz & Espino-Rodríguez, 2016). Engaging in collaborative innovation positively impacts these competitive dimensions in several ways. Firstly, co-created products or services typically offer superior customer value; for example, a partnership with a renowned theme park enables a tour operator to provide exclusive travel packages, enhancing market performance and customer satisfaction (Bouncken & Kraus, 2013; Chin et al., 2021). Secondly, collaboration with knowledge institutions or industry

associations enhances a tour operator's ability to identify and rapidly respond to emerging market trends, thus increasing agility (Marasco et al., 2018). Thirdly, collaborative efforts often yield efficiency improvements or cost reductions (e.g., shared infrastructure, distribution channels), enhancing competitiveness through more attractive pricing or reinvestment opportunities in further innovation (Rodríguez-Díaz & Espino-Rodríguez, 2016).

From a Resource-Based View (RBV) perspective, collaborative innovation represents a capability that allows firms to strategically combine valuable resources across organizational boundaries (Barney, 1991; Wernerfelt, 1984). A firm proficient in managing alliances and partnerships possesses strong relational capabilities, enabling it to establish a distinctive "innovation network" that competitors find challenging to replicate (Chin et al., 2021; Rodríguez-Díaz & Espino-Rodríguez, 2016). Such networks facilitate innovations that are not only novel but also well-aligned with the firm's strategic goals, thus yielding sustainable competitive advantages. For instance, a tour operator with an established partnership network—including airlines, hotels, local guides, and event organizers—can deliver integrated, premium travel experiences that significantly differentiate it from competitors (Rodríguez-Díaz & Espino-Rodríguez, 2016).

Under Dynamic Capabilities Theory (DCT), collaborative innovation embodies the firm's capacity to integrate, build, and reconfigure resources to adapt to dynamic environments (Teece, Pisano, & Shuen, 1997; Teece, 2007). Effective collaborative innovation requires sensing partnership opportunities (e.g., recognizing potential to enhance digital customer engagement through collaborations with app developers), seizing these opportunities by establishing strategic partnerships, and reconfiguring internal processes and resources accordingly (Teece, 2007, 2014). Successfully executed collaborative innovation thus equips firms with the adaptability to swiftly address market shifts and proactively develop new market offerings, thereby maintaining competitive leadership (Teece, 2007).

Empirical studies support the assertion that collaborative innovation significantly enhances firm performance. For example, Bouncken and Kraus (2013) demonstrated that firms engaging in cross-border innovation partnerships exhibited improved market performance and higher success rates in new product introductions. In the tourism context, Chin et al. (2021) documented how collaborative innovation and knowledge-sharing among rural tourism destinations substantially increased competitiveness and sustainability. Collaborative innovation also enhances learning; tourism operators acquire new practices and technological insights from partners, enhancing their absorptive capacity and competitive capabilities (Rodríguez-Díaz & Espino-Rodríguez, 2016; Zahra & George, 2002).

Furthermore, collaborative innovation contributes to organizational agility. A well-networked tour operator can swiftly respond to emerging opportunities—such as increased traveler interest triggered by popular films or global events—by quickly assembling relevant tour packages through established local and international partnerships (Buhalis & Sinarta, 2019; Marasco et al., 2018). Conversely, less-connected competitors typically experience delayed responses, underscoring collaborative innovation's strategic advantage in dynamic tourism markets (Chin et al., 2021). Therefore, we hypothesize a direct positive effect of collaborative innovation on firm competitiveness:

H2: Collaborative innovation has a significant positive impact on the competitiveness of tour operators in China.

The Mediating Role of Collaborative Innovation

Transformational leadership and firm competitiveness are conceptually linked in the management literature, as effective leadership practices are frequently associated with enhanced organizational performance (Bass & Riggio, 2006; Gumusluoglu & Ilsev, 2009). However, the specific mechanisms through which leadership translates into tangible performance outcomes require further elucidation (Jung, Chow, & Wu, 2003; Mittal & Dhar, 2015). We posit that collaborative innovation serves as a critical mediating mechanism in the relationship between transformational leadership and competitiveness among tour operators.

A transformational leader can influence multiple aspects of an organization, but not all directly translate into superior competitiveness (Bass & Riggio, 2006; Gumusluoglu & Ilsev, 2009). A crucial element affected by transformational leadership is an organization's innovative behavior, particularly its propensity to engage in collaborative innovation activities with external stakeholders (Chin, Yusoff, Abas, & Ho, 2021; Marasco, De Martino, Magnotti, & Morvillo, 2018). By fostering an organizational culture that supports change, innovation, and external partnerships, transformational leaders significantly elevate collaborative innovation initiatives within their firms (Gumusluoglu & Ilsev, 2009; Mittal & Dhar, 2015). These enhanced collaborative innovation activities, in turn, lead to new or improved offerings, operational efficiencies, and ultimately, superior competitive performance (Bouncken & Kraus, 2013; Chin et al., 2021). Thus, transformational leadership may indirectly impact firm competitiveness by initially stimulating higher levels of collaborative innovation (Chin et al., 2021; Gumusluoglu & Ilsev, 2009).

This mediation perspective aligns well with insights drawn from both the Resource-Based View (RBV) and Dynamic Capabilities Theory (DCT). From the RBV standpoint, leadership alone—though inherently valuable—is often insufficient to create tangible competitive advantages without first enabling other critical organizational capabilities such as innovation processes and collaborative capabilities (Barney, 1991; Wernerfelt, 1984). Transformational leadership acts as a catalyst, enabling organizations to build and leverage capabilities like effective collaborative innovation, thereby yielding sustainable competitive outcomes (Helfat & Peteraf, 2003; Gumusluoglu & Ilsev, 2009). Similarly, Dynamic Capabilities Theory emphasizes leadership's role in shaping an organization's dynamic capabilities—its capacity to integrate, build, and reconfigure internal and external resources—such as collaborative innovation, which in turn drive sustained performance in rapidly changing environments (Teece, 2007; Teece, Pisano, & Shuen, 1997). Hence, transformational leadership influences firm competitiveness indirectly by nurturing collaborative innovation capabilities, aligning with RBV and DCT frameworks (Teece, 2007; Helfat & Peteraf, 2003).

Practically, observing a highly competitive tour operator led by a transformational leader would likely reveal deliberate promotion of collaborative partnerships, creative ideas, and innovation-driven activities. These collaborative innovation efforts subsequently translate into unique tourism products, increased customer satisfaction, and a sustained competitive advantage (Chin et al., 2021; Marasco et al., 2018). In contrast, without effective collaborative

innovation initiatives, the potential positive influence of transformational leadership might fail to fully materialize in market outcomes. This rationale aligns with empirical findings from prior research across various industries, where innovation frequently mediates the impact of leadership on organizational performance. For instance, Howell and Avolio (1993) found that transformational leadership positively influenced project performance partly through increased innovation at the project level.

Therefore, we hypothesize the mediated relationship as follows:

H3: Collaborative innovation mediates the relationship between transformational leadership and competitiveness, such that transformational leadership enhances collaborative innovation, which in turn increases tour operator competitiveness.

Market Orientation as a Moderator

Market orientation (MO) refers to an organization's strategic focus on collecting and disseminating market intelligence about customer needs, competitors' actions, and broader market trends across its departments, facilitating coordinated actions aimed at delivering superior customer value (Kohli & Jaworski, 1990; Narver & Slater, 1990). A market-oriented tour operator maintains continuous awareness of evolving tourist preferences, competitors' offerings, and broader changes within the tourism environment, promptly adapting strategies accordingly (Chin, Yusoff, Abas, & Ho, 2021; Line & Runyan, 2014). Typical behaviors of market-oriented firms include conducting regular customer satisfaction surveys, encouraging cross-departmental meetings to analyze market feedback, and swiftly adjusting tour packages in response to emerging demands—for example, increased interest in outdoor adventure tourism (Amin, Thurasamy, Aldakhil, & Kaswuri, 2016; Line & Runyan, 2014).

We propose that market orientation moderates the relationship between collaborative innovation and competitiveness. Specifically, we posit that a high level of market orientation strengthens the positive impact of collaborative innovation on firm competitiveness. Thus, collaborative innovation is expected to yield greater competitive advantages for tour operators exhibiting higher levels of market orientation (Chin et al., 2021; Wang & Chung, 2013).

The rationale behind this moderation hypothesis is grounded in both Dynamic Capabilities Theory (DCT) and established marketing theory. While collaborative innovation facilitates the development of new offerings and processes, the degree to which these innovations translate into competitiveness depends largely on their alignment with customer demands and market requirements (Teece, 2007; Teece, Pisano, & Shuen, 1997). Firms with a strong market orientation are better positioned to focus their collaborative innovation efforts on areas of high customer value and unmet market needs (Narver & Slater, 1990; Wang & Chung, 2013). For example, a market-oriented tour operator recognizing increased customer demand for personalized itineraries may proactively collaborate with local guides and suppliers to create customizable tour packages, consequently enhancing customer satisfaction, loyalty, and overall competitiveness. Conversely, firms with low market orientation might pursue collaborative innovations based predominantly on internal convenience or technological novelty, potentially resulting in solutions misaligned with customer preferences, and thus yielding fewer competitive advantages (Amin et al., 2016; Chin et al., 2021).

Moreover, market-oriented firms are generally more effective at leveraging innovations due to superior marketing capabilities, clearer insights into effective pricing strategies, and stronger relationships with customers facilitating rapid feedback loops (Kohli & Jaworski, 1990; Ngo & O’Cass, 2013). Within the tourism context, a highly market-oriented tour operator co-developing a new service is more capable of effectively marketing it to targeted segments, continually refining it based on customer feedback, and ultimately converting the innovation into sustained competitive advantage through enhanced sales and brand reputation. In contrast, firms lacking market orientation may fail to capitalize fully on collaborative innovations due to ineffective marketing, poor customer targeting, or inadequate market feedback integration (Amin et al., 2016; Wang & Chung, 2013).

Empirical research supports the moderating role of market orientation in innovation-performance relationships. Ngo and O’Cass (2013), for instance, found that market orientation significantly strengthened the effect of innovation capabilities on firm performance in service-sector firms. Similarly, Wang and Chung (2013) provided empirical evidence from Chinese enterprises demonstrating that market orientation amplified the positive performance outcomes of collaborative innovation initiatives. Essentially, market orientation ensures that innovation activities are market-driven rather than internally focused, significantly enhancing their potential success in the marketplace (Ngo & O’Cass, 2013; Wang & Chung, 2013).

Thus, we formalize the moderation hypothesis:

H4: Market orientation positively moderates the relationship between collaborative innovation and competitiveness, such that the effect of collaborative innovation on competitiveness is stronger for tour operators with high market orientation than for those with low market orientation.

Figure 1 presents the conceptual framework of our study, illustrating the hypothesized relationships.

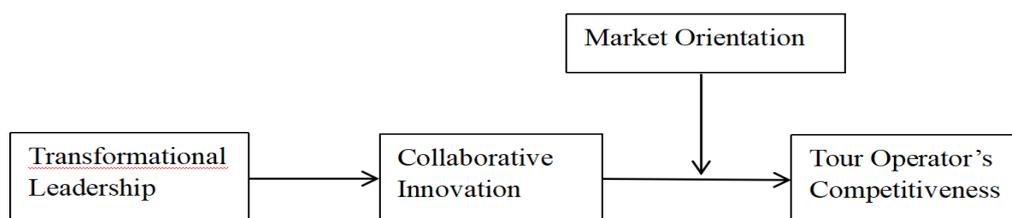


Figure 1: Conceptual framework

Methodology

Research Design and Sample

This study employed a quantitative, cross-sectional survey design to test the hypotheses. The target population was tour operating firms in China’s Yangtze River Delta (YRD) region, which includes major tourism markets such as Shanghai, Jiangsu, Zhejiang, and Anhui provinces. This region was chosen because it is one of China’s most economically advanced and tourism-rich areas, with a high concentration of tour operators serving both domestic and international tourists. By focusing on a specific region, we controlled for certain extraneous factors (like regional policy differences) while still capturing a diverse range of tour operators

(from small agencies to large travel companies). The unit of analysis is the organization (tour operator firm), with a senior representative of each firm (owner, CEO, or senior manager) serving as the key informant.

We compiled a sampling frame from industry directories provided by the China National Tourism Administration and regional tourism associations, aiming for a broad coverage of tour operators in the YRD. Given the lack of a single comprehensive list, we utilized a combination of registry data and online travel platforms to identify active tour operators. A purposive sampling strategy was used to ensure that respondents held positions of authority and knowledge (owners or top managers) and that their firms engaged in or had potential for innovation activities. To maximize participation, we first conducted outreach via phone and email to explain the research purpose and assure confidentiality, then distributed the survey link online. Data collection took place in mid-2024, after China's tourism sector had started rebounding from pandemic disruptions.

A total of 250 tour operators were invited to participate. We received 217 questionnaire responses. After screening for completeness and data quality, 200 responses were deemed usable for analysis (17 were dropped due to excessive missing data or unengaged responses). This sample size exceeds the minimum required by a power analysis for our model complexity. Using G*Power software for an f^2 effect size of 0.15 (moderate), $\alpha = 0.05$, and power = 0.95 for a linear multiple regression with up to 3 predictors (as in our largest equation for competitiveness ~ CI, TL, MO, and interaction), the suggested minimum sample was about 119. Our sample of 200 thus provides a comfortable margin for robust statistical testing.

Measures

In this study, we adapted established measurement scales from prior published research. Responses were provided using a five-point Likert scale ranging from "1 = strongly disagree" to "5 = strongly agree."

Transformational leadership was assessed using the Multifactor Leadership Questionnaire (MLQ) developed by Bass and Avolio (1995). The scale includes 20 items covering four dimensions: idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration. Sample items include: "Our leader articulates a compelling vision of the future" and "Our leader encourages thinking about problems in new ways." Previous studies have confirmed strong reliability for this scale (Bass & Riggio, 2006; Gumusluoglu & Ilsev, 2009). In this study, Cronbach's alpha was 0.96.

Collaborative innovation was measured using the scale developed by Pundziene and Geryba (2023). This construct comprises two sub-dimensions: partnership networks and relational collaboration. Example items for partnership networks include: "We collaborate extensively with external firms and institutions to pursue innovation," and for relational collaboration: "We frequently co-create innovative products or services with our partners." Earlier research has shown high reliability for this measure (Chin et al., 2021; Marasco et al., 2018). The Cronbach's alpha for this scale in the current study was 0.94.

Competitiveness was evaluated using five items adapted from Jiang et al. (2016). Items capture the firm's competitive position relative to its main rivals, including market

responsiveness and service quality. Representative items are: "Our organization provides higher-quality products and services than our competitors," and "Our organization responds faster to market changes compared to our competitors." Previous literature employing this scale reported high reliability (Jiang et al., 2016). In the present study, Cronbach's alpha was 0.91.

Market orientation was measured by adopting the 15-item scale developed by Amin et al. (2016), comprising three dimensions: customer orientation, competitor orientation, and inter-functional coordination. Example items include: "Our firm is driven by customer needs and satisfaction," and "We regularly discuss competitors' strategies within our firm." Prior research using this scale has established its reliability (Amin et al., 2016). The Cronbach's alpha for market orientation in this study was 0.90.

Results

Profile of respondents

This study surveyed 200 tour operator representatives from eastern China. In terms of geographic distribution, 38.5% of respondents were based in Shanghai, 37.5% in Jiangsu, 18.0% in Zhejiang, and 6.0% in Anhui—regions that represent major centers of tourism business activity within the Yangtze River Delta.

The vast majority of firms were operationally active and relatively small in scale, with only 1.5% reporting fewer than five employees. This indicates that most respondents came from small to medium-sized enterprises.

At the individual level, 60.4% of respondents were male, while 39.6% were female. The most common age group was 41–50 years old (43.4%), followed by those aged 31–40 (28.3%), 51–60 (13.2%), and 20–30 (11.3%). In terms of industry experience, 45.3% of participants reported having worked in tourism for 11–20 years, 28.3% had 6–10 years of experience, and 16.0% had more than 20 years, indicating a highly experienced sample.

With respect to professional roles, a majority of the respondents (61.5%) identified as Managing Directors, while 38.5% were Business Owners. No respondents selected Director or Other roles, suggesting the sample primarily consisted of senior executives or firm founders with strategic decision-making authority.

Overall, the profile reflects a cohort of experienced, leadership-level individuals operating within small and mid-sized tourism businesses located in economically dynamic provinces, making them well-positioned to report on collaborative innovation practices within the sector.

Measurement Model Evaluation

In this study, we assessed construct validity by evaluating the measurement model, which specifies how each observed indicator relates to its corresponding latent construct. This involved examining factor loadings, internal consistency reliability, convergent validity, and discriminant validity (Hair et al., 2010; Henseler et al., 2016).

To ensure indicator reliability, factor loadings were analyzed with the recommended threshold of 0.70 as the benchmark (Hair et al., 2010). All indicators exhibited loadings well

above this threshold, confirming satisfactory reliability. Composite reliability (CR) and Cronbach's alpha were used to assess the internal consistency of constructs. According to Hair et al. (2019), both CR and Cronbach's alpha should exceed 0.70 for adequate reliability. The results revealed that transformational leadership exhibited excellent internal consistency, with a CR value of 0.98 and Cronbach's alpha of 0.96. Collaborative innovation showed similarly high internal consistency, with CR at 0.97 and Cronbach's alpha at 0.94. Competitiveness also demonstrated strong reliability (CR = 0.96, Cronbach's alpha = 0.91), while market orientation had a CR of 0.95 and a Cronbach's alpha of 0.90. These results confirm the high reliability of the measurement instruments used in this study.

We assessed convergent validity through the average variance extracted (AVE). An AVE value above 0.50 indicates satisfactory convergent validity, meaning the latent construct explains over half of the variance in its indicators (Hair et al., 2010). The AVE values were as follows: transformational leadership (AVE = 0.722), collaborative innovation (AVE = 0.945), competitiveness (AVE = 0.835), and market orientation (AVE = 0.866). Thus, all constructs met the recommended criterion, demonstrating strong convergent validity.

Table 1
Measurement Model Evaluation

First-order constructs	Second-order construct	Item	Loadings	AVE	CR
TL		TL1	0.768	0.722	0.981
		TL2	0.796		
		TL3	0.748		
		TL4	0.753		
		TL5	0.803		
		TL6	0.749		
		TL7	0.830		
		TL8	0.850		
		TL9	0.827		
		TL10	0.823		
		TL11	0.864		
		TL12	0.842		
		TL13	0.874		
		TL14	0.852		
		TL15	0.837		
		TL16	0.870		
		TL17	0.865		
		TL18	0.883		
		TL19	0.853		
		TL20	0.815		
PN		CI1	0.914	0.843	0.941
		CI2	0.914		
		CI3	0.926		
RC		CI4	0.938	0.880	0.936
		CI5	0.938		
	CI	PN	0.982	0.945	0.972
		RC	0.962		

CUO	MO1	0.741	0.551	0.880
	MO2	0.724		
	MO3	0.715		
	MO4	0.766		
	MO5	0.766		
	MO6	0.740		
CO	MO7	0.789	0.591	0.852
	MO8	0.851		
	MO9	0.806		
IF	MO10	0.781	0.563	0.866
	MO11	0.803		
	MO12	0.840		
	MO13	0.798		
	MO14	0.838		
	MO15	0.807		
MO	CUO	0.947	0.866	0.951
	CO	0.910		
	IF	0.934		
COM	COM1	0.889	0.835	0.962
	COM2	0.651		
	COM3	0.643		
	COM4	0.619		
	COM5	0.852		

Discriminant validity was evaluated using the heterotrait-monotrait (HTMT) ratio of correlations, as suggested by Henseler et al. (2016). HTMT values below the stringent criterion of 0.85 indicate sufficient discriminant validity. All constructs had HTMT values below this threshold. Specifically, the HTMT ratios were 0.508 between transformational leadership and collaborative innovation, 0.129 between transformational leadership and market orientation, 0.598 between collaborative innovation and competitiveness, and 0.076 between collaborative innovation and market orientation. Moreover, none of the 95% confidence intervals for these HTMT ratios contained the value 1, reinforcing discriminant validity. This indicates the constructs are distinct and clearly measured different aspects of the theoretical model.

Table 2
Discriminant Validity – Heterotrait-Monotrait Ratio (HTMT)

	CI	COM	MO	TL
CI				
COM	0.598			
MO	0.076	0.734		
TL	0.508	0.429	0.129	

Structural Model Assessment

Once the measurement model assessment was completed and the constructs demonstrated adequate reliability and validity, the next step involved evaluating the structural model. This

assessment examined the explanatory power, path coefficients, significance, model fit, and predictive relevance of the proposed model (Hair et al., 2019; Henseler et al., 2016).

Coefficient of determination (R^2)

The coefficient of determination (R^2) represents the predictive accuracy of the structural model, indicating the combined explanatory power of independent variables on dependent variables (Hair et al., 2014). According to the recommended criteria, R^2 values of 0.67, 0.33, and 0.19 are considered strong, moderate, and weak, respectively (Hair et al., 2019). In this study, transformational leadership explained 24.1% ($R^2 = 0.241$) of the variance in collaborative innovation. Additionally, collaborative innovation, market orientation, and their interaction collectively accounted for 80.0% ($R^2 = 0.800$) of the variance in competitiveness, demonstrating a strong predictive power of the structural model.

Effect size (f^2)

We further evaluated the structural model by examining the effect size (f^2) of each predictor variable on the endogenous constructs. Effect sizes of 0.02, 0.15, and 0.35 indicate small, medium, and large effects, respectively (Hair et al., 2019). The results indicated transformational leadership had a substantial effect size on collaborative innovation ($f^2 = 0.422$). Collaborative innovation demonstrated a very large effect size on competitiveness ($f^2 = 1.60$). Moreover, the moderating effect of market orientation on the collaborative innovation–competitiveness relationship showed a small-to-medium effect size ($f^2 = 0.110$), indicating meaningful moderation.

Hypothesis testing

We tested the hypothesized relationships using a bootstrapping procedure with 5,000 resamples to establish significance. As summarized in Table 3, transformational leadership exhibited a significant positive effect on collaborative innovation ($\beta = 0.487$, $t = 10.702$, $p < 0.001$), thereby supporting H1. Collaborative innovation was positively and significantly related to competitiveness ($\beta = 0.575$, $t = 15.795$, $p < 0.001$), supporting H2. Furthermore, the indirect effect of transformational leadership on competitiveness via collaborative innovation was significant ($\beta = 0.280$, $t = 8.471$, $p < 0.001$), supporting H3 and confirming full mediation.

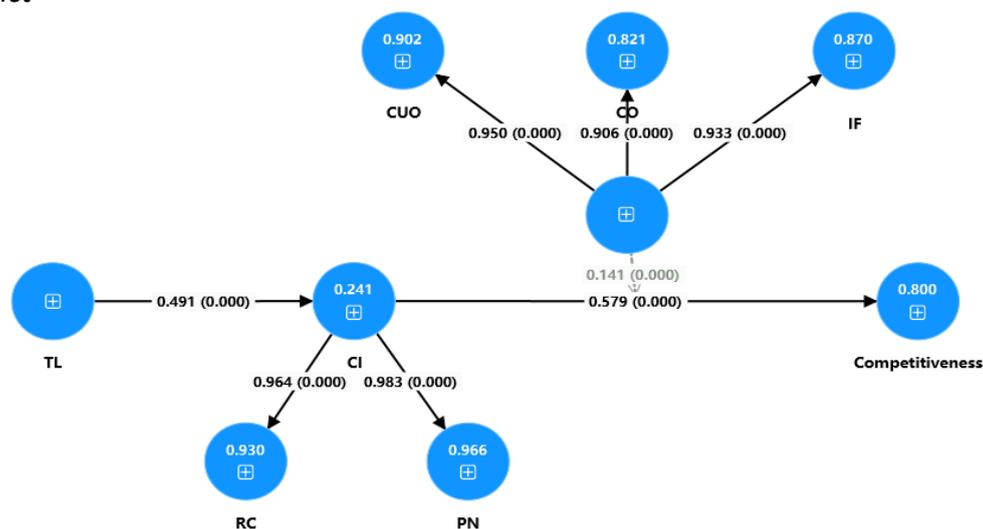
The moderation hypothesis (H4), testing the interaction effect between collaborative innovation and market orientation on competitiveness, was also supported ($\beta = 0.147$, $t = 4.612$, $p < 0.001$). This indicates that market orientation significantly strengthens the relationship between collaborative innovation and competitiveness.

These results collectively support all hypothesized relationships and provide robust evidence for the structural validity of the proposed model.

Table 3
Hypothesis Testing Results

Hypothesis	Path Relationship	β	T-values	P-values	Supported
H1	Transformational Leadership → Collaboration Innovation	0.487	10.702	0.000	Yes
H2	Collaborative Innovation → Competitiveness	0.575	15.795	0.000	Yes
H3	Transformational Leadership → Collaboration Innovation → Competitiveness	0.280	8.471	0.000	Yes
H4	Collaborative Innovation x Market Orientation → Competitiveness	0.147	4.612	0.000	Yes

PLSpredict



Based on the PLS-Predict analysis results presented in Table 4, all indicators for competitiveness (COM1 to COM5) exhibited lower root mean square errors (RMSE) in the PLS-SEM compared to LM. Specifically, all indicators showed negative values of RMSE differences, ranging from -0.078 to -0.1. These findings clearly indicate that the structural model in this study possesses strong predictive power, demonstrating a robust capability to predict new observations effectively. However, further exploration of additional predictor variables or alternative modeling techniques might enhance the predictive accuracy even more.

Table 4
PLS Predict Analysis

	Q ² predict	PLS-SEM_RMSE	LM_RMSE	PLS-LM RMSE
COM1	0.519	0.774	0.867	-0.093
COM2	0.516	0.741	0.819	-0.078
COM3	0.472	0.785	0.885	-0.1
COM4	0.438	0.784	0.874	-0.09
COM5	0.437	0.821	0.901	-0.08

Discussion and Conclusions

The purpose of this study was to examine how transformational leadership (TL), collaborative innovation (CI), and market orientation (MO) collectively influence the competitiveness of tour operators in China. Using the Resource-Based View (RBV) and Dynamic Capabilities Theory (DCT), the study specifically sought to explore collaborative innovation as a mediator and market orientation as a moderator in the relationship between transformational leadership and competitiveness. Conducted within the Chinese tourism industry context, our research addresses a crucial gap by integrating leadership, innovation, and market orientation constructs into a cohesive explanatory framework.

Our results confirmed the positive relationship between transformational leadership and collaborative innovation, supporting Hypothesis 1. This finding aligns with prior research that highlights the central role of transformational leaders in stimulating innovation processes within their organizations (Bass & Riggio, 2006; Gumusluoglu & Ilsev, 2009). Transformational leaders cultivate an environment of openness and risk-taking, encouraging employees to actively engage in collaborative partnerships and innovation projects (Mittal & Dhar, 2015). Our results affirm that leaders who clearly articulate vision, inspire creativity, and foster empowerment can significantly elevate the extent to which their organizations participate in collaborative innovation activities.

The findings also demonstrated that collaborative innovation positively and significantly impacts competitiveness among tour operators, thus supporting Hypothesis 2. These results are consistent with prior studies which underscore collaborative innovation as a strategic driver of competitive advantage through leveraging external resources, minimizing innovation costs, and enhancing market responsiveness (Bouncken & Kraus, 2013; Chin et al., 2021). Collaborative innovation facilitates the development of distinct tourism products and services that respond directly to evolving customer demands, thereby enhancing overall firm competitiveness.

Our analysis revealed collaborative innovation fully mediated the relationship between transformational leadership and competitiveness, thus confirming Hypothesis 3. This mediation indicates that transformational leadership enhances competitiveness indirectly by first fostering collaborative innovation initiatives. From the RBV and DCT perspectives, this demonstrates that leadership alone does not directly yield competitiveness; rather, it enables other critical capabilities, such as collaborative innovation, that translate leadership-driven

initiatives into tangible market outcomes (Helfat & Peteraf, 2003; Teece, 2007). This finding aligns with existing leadership research highlighting innovation as a crucial mechanism through which transformational leadership improves organizational performance (Howell & Avolio, 1993).

Additionally, the moderation analysis supported Hypothesis 4, confirming that market orientation significantly strengthens the positive relationship between collaborative innovation and competitiveness. Specifically, firms with a higher market orientation were more successful in translating collaborative innovation into enhanced competitive performance. This aligns with prior marketing and strategic management literature, underscoring that market-oriented firms effectively leverage market intelligence to guide innovation activities, ensuring alignment with customer preferences and competitive opportunities (Amin et al., 2016; Ngo & O’Cass, 2013; Wang & Chung, 2013). Conversely, firms with lower market orientation may struggle to convert collaborative innovation efforts into competitive advantages due to misalignment with market demands.

Theoretical Implications

This study contributes to the theoretical understanding of transformational leadership, innovation, and market orientation in several ways. First, by demonstrating collaborative innovation as a full mediator in the relationship between transformational leadership and competitiveness, the study highlights an essential mechanism underlying leadership effectiveness in service industries, particularly tourism. Second, our results extend RBV by showing how transformational leadership serves as a valuable, rare, and inimitable human resource that enhances firm competitiveness indirectly through the development of collaborative innovation capabilities. Third, we integrate DCT into our analysis by identifying market orientation as a crucial adaptive capability that significantly enhances the effectiveness of collaborative innovation in dynamic tourism environments. This combined perspective enriches existing leadership and innovation research by showing how different theoretical lenses can be cohesively integrated to explain complex organizational outcomes.

Practical Implications

From a practical standpoint, our findings offer valuable guidance for tour operators aiming to achieve sustainable competitiveness. First, leadership training programs that promote transformational leadership behaviors (e.g., articulating vision, stimulating intellectual curiosity, individualized support) can enhance the propensity of organizations to engage in meaningful collaborative innovation activities. Tour operators are encouraged to develop structured mechanisms—such as cross-functional teams, innovation partnerships, and dedicated collaborative innovation units—to effectively translate transformational leadership into practical market outcomes.

Second, our findings underscore the necessity for firms to foster a robust market-oriented culture, enabling them to effectively align innovation efforts with customer demands and emerging market trends. By establishing consistent market intelligence-gathering processes and embedding market-driven decision-making into organizational practices, tour operators can significantly enhance the returns from collaborative innovation initiatives, thus achieving greater competitive advantages.

Third, managers should recognize that transformational leadership alone, without supportive internal processes such as collaborative innovation and strong market orientation, may yield limited competitive gains. Leaders should prioritize developing internal capabilities and external partnerships that facilitate rapid adaptation to market dynamics and customer needs, ensuring innovation efforts align closely with strategic market opportunities.

Limitations and Future Research

This study acknowledges several limitations that provide avenues for future research. First, the cross-sectional nature of our data limits our ability to make definitive causal claims. Future research employing longitudinal or experimental designs could better establish causal relationships and provide more robust evidence regarding the temporal dynamics between leadership, collaborative innovation, market orientation, and competitiveness.

Second, this study relied primarily on self-report measures, raising potential concerns regarding common method bias. Future studies should consider incorporating multiple data sources and objective performance measures to enhance data validity. Additionally, extending the scope beyond a single region or sector could help generalize the results more broadly, particularly to other service-based industries or geographic contexts.

Finally, our model focused exclusively on transformational leadership. Future research might explore additional leadership styles (e.g., transactional, inclusive, servant leadership) and their interplay with collaborative innovation and market orientation, potentially uncovering different nuances and moderating conditions. Furthermore, exploring additional mediating or moderating variables—such as organizational culture, technology readiness, or competitive intensity—may provide deeper insights into the complex relationships influencing competitiveness in tourism and related sectors.

In conclusion, this study contributes significantly to our understanding of how transformational leadership influences firm competitiveness in the Chinese tourism industry through collaborative innovation and the moderating role of market orientation. Our findings provide actionable insights for practitioners aiming to harness leadership and innovation capabilities to enhance competitive positioning in highly dynamic markets.

References

- Amin, M., Thurasamy, R., Aldakhil, A. M., & Kaswuri, A. H. B. (2016). The effect of market orientation as a mediating variable in the relationship between entrepreneurial orientation and SMEs performance. *Nankai Business Review International*, 7(1), 39–59. <https://doi.org/10.1108/NBRI-08-2015-0019>
- Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99–120. <https://doi.org/10.1177/014920639101700108>
- Bass, B. M. (1985). *Leadership and performance beyond expectations*. Free Press.
- Bass, B. M., & Avolio, B. J. (1994). *Improving organizational effectiveness through transformational leadership*. Sage.
- Bass, B. M., & Riggio, R. E. (2006). *Transformational leadership* (2nd ed.). Psychology Press.
- Bouncken, R. B., & Kraus, S. (2013). Innovation in knowledge-intensive industries: The double-edged sword of cooperation. *Journal of Business Research*, 66(10), 2060–2070. <https://doi.org/10.1016/j.jbusres.2013.02.032>
- Buhalis, D., & Sinarta, Y. (2019). Real-time co-creation and oneness service: Lessons from tourism and hospitality. *Journal of Travel & Tourism Marketing*, 36(5), 563–582. <https://doi.org/10.1080/10548408.2019.1592059>
- Chin, C. H., Yusoff, N. H., Abas, M. A., & Ho, W. P. (2021). Developing sustainable rural tourism through a two-stage destination image model: The moderating roles of community attachment and involvement. *Sustainability*, 13(13), 7429. <https://doi.org/10.3390/su13137429>
- Elsetouhi, A. M., Hammad, A. A., Nagm, A. E. A., & Elbaz, A. M. (2018). Perceived leader behavioral integrity and employee voice in SMEs travel agents: The mediating role of empowering leader behaviors. *Tourism Management*, 65, 100–115. <https://doi.org/10.1016/j.tourman.2017.09.022>
- Gössling, S., Scott, D., & Hall, C. M. (2020). Pandemics, tourism and global change: A rapid assessment of COVID-19. *Journal of Sustainable Tourism*, 29(1), 1–20. <https://doi.org/10.1080/09669582.2020.1758708>
- Gumusluoglu, L., & Ilsev, A. (2009). Transformational leadership, creativity, and organizational innovation. *Journal of Business Research*, 62(4), 461–473. <https://doi.org/10.1016/j.jbusres.2007.07.032>
- Hao, F., Xiao, Q., & Chon, K. (2020). COVID-19 and China's hotel industry: Impacts, a disaster management framework, and post-pandemic agenda. *International Journal of Hospitality Management*, 90, 102636. <https://doi.org/10.1016/j.ijhm.2020.102636>
- Helfat, C. E., & Peteraf, M. A. (2003). The dynamic resource-based view: Capability lifecycles. *Strategic Management Journal*, 24(10), 997–1010. <https://doi.org/10.1002/smj.332>
- Hjalager, A. M. (2010). A review of innovation research in tourism. *Tourism Management*, 31(1), 1–12. <https://doi.org/10.1016/j.tourman.2009.08.012>
- Hoang, G., Hill, S. R., Lu, V. N., & Freeman, S. (2017). Drivers of service climate: Emerging market perspective. *Journal of Services Marketing*, 31(4/5), 476–492. <https://doi.org/10.1108/JSM-02-2016-0080>
- Howell, J. M., & Avolio, B. J. (1993). Transformational leadership, transactional leadership, locus of control, and support for innovation. *Journal of Applied Psychology*, 78(6), 891–902. <https://doi.org/10.1037/0021-9010.78.6.891>
- Huang, Y., & Wilkinson, I. F. (2013). The dynamics and evolution of trust in business relationships. *Industrial Marketing Management*, 42(3), 455–465. <https://doi.org/10.1016/j.indmarman.2013.02.016>

- Jung, D. I., Chow, C., & Wu, A. (2003). The role of transformational leadership in enhancing organizational innovation. *The Leadership Quarterly*, 14(4–5), 525–544. [https://doi.org/10.1016/S1048-9843\(03\)00050-X](https://doi.org/10.1016/S1048-9843(03)00050-X)
- Kohli, A. K., & Jaworski, B. J. (1990). Market orientation: The construct, research propositions, and managerial implications. *Journal of Marketing*, 54(2), 1–18. <https://doi.org/10.2307/1251866>
- Law, R., Chan, I. C. C., & Wang, L. (2018). A comprehensive review of mobile technology use in hospitality and tourism. *Journal of Hospitality Marketing & Management*, 27(6), 626–648. <https://doi.org/10.1080/19368623.2018.1423251>
- Li, L., Robinson, P., & Oriade, A. (2017). Destination marketing: The use of technology since the millennium. *Journal of Destination Marketing & Management*, 6(2), 95–102. <https://doi.org/10.1016/j.jdmm.2017.04.008>
- Li, L., & Robinson, P. (2020). Guanxi as a dynamic capability in the tourism industry: A case study of tour operators in China. *Journal of China Tourism Research*, 16(1), 121–136. <https://doi.org/10.1080/19388160.2019.1625844>
- Line, N. D., & Runyan, R. C. (2014). Destination marketing and the service-dominant logic: A resource-based operationalization of strategic marketing assets. *Tourism Management*, 43, 91–102. <https://doi.org/10.1016/j.tourman.2014.01.024>
- Marasco, A., De Martino, M., Magnotti, F., & Morvillo, A. (2018). Collaborative innovation in tourism and hospitality: A systematic review of the literature. *International Journal of Contemporary Hospitality Management*, 30(6), 2364–2395. <https://doi.org/10.1108/IJCHM-01-2018-0043>
- Mittal, S., & Dhar, R. L. (2015). Transformational leadership and employee creativity: Mediating role of creative self-efficacy and moderating role of knowledge sharing. *Management Decision*, 53(5), 894–910. <https://doi.org/10.1108/MD-07-2014-0464>
- Narver, J. C., & Slater, S. F. (1990). The effect of a market orientation on business profitability. *Journal of Marketing*, 54(4), 20–35. <https://doi.org/10.2307/1251757>
- Ngo, L. V., & O’Cass, A. (2013). Innovation and business success: The mediating role of customer participation. *Journal of Business Research*, 66(8), 1134–1142. <https://doi.org/10.1016/j.jbusres.2012.03.009>
- Pundziene, A., & Geryba, L. (2023). Managing technological innovation: Dynamic capabilities, collaborative innovation, and born-digital SMEs’ performance. *IEEE Transactions on Engineering Management*. Advance online publication. <https://doi.org/10.1109/TEM.2023.3265568>
- Teece, D. J. (2007). Explicating dynamic capabilities: The nature and microfoundations of (sustainable) enterprise performance. *Strategic Management Journal*, 28(13), 1319–1350. <https://doi.org/10.1002/smj.640>
- Teece, D. J., Pisano, G., & Shuen, A. (1997). Dynamic capabilities and strategic management. *Strategic Management Journal*, 18(7), 509–533. [https://doi.org/10.1002/\(SICI\)1097-0266\(199708\)18:7<509::AID-SMJ882>3.0.CO;2-Z](https://doi.org/10.1002/(SICI)1097-0266(199708)18:7<509::AID-SMJ882>3.0.CO;2-Z)
- Teece, D. J. (2014). The foundations of enterprise performance. *Strategic Management Journal*, 35(3), 328–331. <https://doi.org/10.1002/smj.2130>
- Wang, C. L., & Chung, H. F. (2013). The moderating role of managerial ties in market orientation and innovation: An Asian perspective. *Journal of Business Research*, 66(12), 2431–2437.
- Wernerfelt, B. (1984). A resource-based view of the firm. *Strategic Management Journal*, 5(2), 171–180. <https://doi.org/10.1002/smj.4250050207>

- World Travel & Tourism Council (WTTC). (2020). *Travel & Tourism: Global Economic Impact & Trends 2020*. WTTC.
- Yang, J., Ryan, C., & Zhang, L. (2013). Social conflict in communities impacted by tourism. *Tourism Management*, 35, 82–93. <https://doi.org/10.1016/j.tourman.2012.06.002>
- Yang, Y., Gu, J., & Cen, J. (2021). Festival tourism and economic development: Empirical evidence from China. *Tourism Economics*, 27(4), 793–812. <https://doi.org/10.1177/1354816619885916>
- Zhang, H. Q., Song, H., & Huang, G. Q. (2009). Tourism supply chain management: A new research agenda. *Tourism Management*, 30(3), 345–358. <https://doi.org/10.1016/j.tourman.2008.12.010>