



## 3-Tier Business Model - Online Travel Agencies

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**Abstract:** In today's era, Online Travel Services Booking has evolved into an essential component of everyday life, and the vast expansion of the internet has brought about significant changes in the lifestyle of the entire world. The advent of this technological revolution has given rise to a newfangled concept of online booking travel services, which has radically transformed how people book their travel arrangements. The Online Travel Booking Application primarily serves as a booking platform that caters to viewing and booking travel services, with the main goal of providing the utmost convenience to customers. In contrast to the traditional offline booking process, which was an arduous and time-consuming procedure, the online travel booking system has gained widespread popularity due to its efficiency and user-friendly features. The availability of booking offers online has made it simple to keep track of bookings, manage client databases, and enhance the quality of travel booking services. This cutting-edge technology empowers users to select packages from a comprehensive catalog. The user's personal information is kept confidential and is only saved in the database when necessary. Furthermore, each user is assigned a unique identification number and password that cannot be shared, thus ensuring the safe and secure booking of travel services.

### 1. Introduction:

The revolutionary advancements in internet and mobile communication technology have triggered a significant paradigm shift in the business world, requiring enterprises to constantly innovate their business models in order to achieve success in the future. The effectiveness of these models, which encompass not only services derived from the Internet of Things (IoT) but also the integration of various business opportunities, will be closely linked to the future prosperity of companies [1]. In recent years, the management of academic communities has been emphasizing the importance of analyzing and providing a comprehensive view of enterprise development, as evidenced by the growing popularity of companies such as Amazon, Facebook, Google, and Alibaba, which offer new services through cutting-edge technology and have witnessed explosive growth in both market value and the network ecosystem that has penetrated every aspect of people's lives, driving economic output to unprecedented levels. Similarly, emerging internet companies like Airbnb, LINE, Uber, YouTube, and Netflix are rapidly adapting to the trend of rapid popularity of action networks and community services, with communication services and e-commerce dramatically altering the daily lives of people [2]. Information services, once dismissed as mere empty slogans and web bubble technology, have now emerged from the virtual world of 1's and 0's to affect the real economy and introduce a new business model. With new applications, services, platforms, data, and devices emerging as a crowded playground for companies seeking to capitalize on emerging opportunities, they must create and develop new business models that are tailored to the digital world and generate value for connected customers.

Business model innovation has emerged as a critical means of driving innovation in modern organizations, yet the factors that underpin its success remain poorly understood. The lack of tools capable of facilitating the holistic examination of business models, along with the complex interplay between changes to these

models and corresponding market outcomes, presents significant challenges to researchers and practitioners alike. To address these issues, this paper introduces a novel and innovative comprehensive framework that offers an integrated, synergistic view of all the critical components of the business model. By providing a unified perspective that takes into account the various interrelated elements of the business model, this framework enables a more nuanced understanding of the factors that contribute to successful business model innovation. Through this approach, organizations can gain valuable insights into the ways in which they can optimize their business models to drive growth, enhance competitiveness, and meet evolving customer needs. This framework represents a significant step forward in our ability to understand and leverage the power of business model innovation in today's fast-changing and dynamic business environment.

The primary objective of this paper is to offer a comprehensive review of the academic literature pertaining to the emerging concept of business model innovation. In addition, this paper aims to address the dearth of theoretical underpinnings in the research on business models by discussing potential theoretical foundations that are suitable for studying business model innovation. Based on the synthesized understanding of the concept and its existing research streams, as well as the proposed theoretical foundations, an integrated research agenda for future research on business model innovation is proposed. To achieve this objective, the paper reviews the literature focusing on the actions and evolution of a firm and constructs a synthesis that delineates the various components of a business model. Drawing from the tourism and hospitality literature, this paper highlights the primary research on trajectories and themes in the context of OTA. Moreover, the paper analyzes the accelerated growth of research on websites, blogs, and social media on tourism and uses main path analysis to investigate the development trend of the synergistic relationship between innovative e-tourism applications and new technologies. Through this comprehensive review and analysis, the paper aims to offer valuable insights into the ways in which business model innovation can drive organizational growth and competitiveness, as well as inform future research in this critical area of inquiry.

## II. Literature Review:

### The Perspective on Business Model

The term "Business Model" has a long history in the literature of management research, with different scholars and researchers using various terms and definitions to describe it. Despite its popularity and widespread use in the business world, there is still no agreed-upon definition of the term, which can lead to confusion and challenges when attempting to understand the different components and nature of a business model [15]. Additionally, the term is often used interchangeably with other related terms such as strategy, business concept, revenue model, and economic model.

The concept of a business model emphasizes the importance of a systematic approach to organizing and coordinating business activities, resources, and processes in a way that creates value for customers and generates profits for the firm. A well-designed business model should address key questions such as: Who are the target customers? What are their needs and preferences? What value proposition does the firm offer to meet those needs? How does the firm generate revenue and sustain profitability over time? What resources and capabilities are required to deliver the value proposition and support the business model?

In essence, a business model can be seen as a blueprint for the way a firm creates and captures value. It defines the core activities, processes, and relationships that enable the firm to deliver a unique and differentiated value proposition to its target customers, while also generating sustainable profits for the firm. The design and implementation of a successful business model require a deep understanding of the market, the competitive landscape, and the firm's internal capabilities and resources. It also requires continuous adaptation and innovation in response to changing customer needs and market dynamics.

Business models are a way for enterprises to understand how they can create and capture value in their industry, and to design a strategy for profitability and growth. It is an important concept in the management field as it enables companies to enhance customer value and maintain their competitive advantage [14]. Business models also play a key role in attracting stakeholders and venture capital, which is critical for the development of new enterprises and the success of innovative ventures.

A well-designed business model can help an enterprise to generate sustainable profits and maintain its competitive advantage in the long term. By understanding the elements and relationships that make up the business logic of a particular entity, a business model can guide decision-making and resource allocation, help to identify potential risks and opportunities and provide a roadmap for achieving strategic goals. Additionally, a clear and effective business model can help to attract investors, partners, and customers, as it provides a clear value proposition and a credible plan for delivering that value.

This paper presents a robust framework that encompasses an innovative 3-tier business model as depicted in Figure 1. The framework includes a competitive advantage phase, and it also incorporates the 2-tier business model (Huarng, 2013) [13], which consists of a concept model and a financial model. This framework provides a comprehensive view of all the critical components of the business model, and it can be effectively utilized by entrepreneurs and managers to comprehend the dynamics of business model innovation.

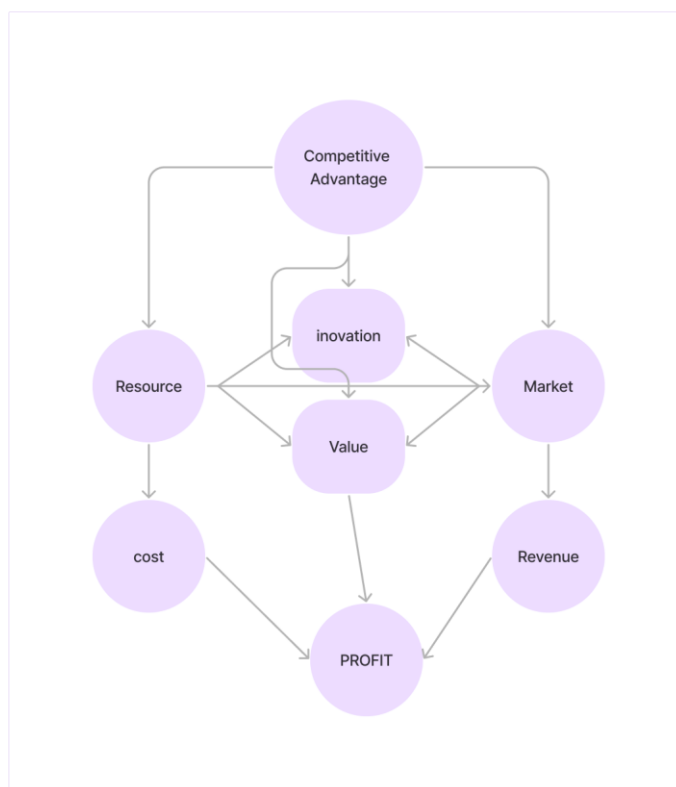


Figure 1: Innovative 3-tier business model

### Competitive advantage phase

The concept of competitive advantage has long been fundamental in the field of strategic management (Baaij, Greevena, & Dalen, 2004; South, 1981). It explains the differences in performance among firms and is crucial to defining a firm's long-term plan of action, known as a business strategy (Ceccagnoli, 2009; Zahra & Covin, 1993). Due to its importance, competitive advantage is widely taught in strategic management courses and featured in textbooks as an essential concept in business strategy (J.B. Barney, 1997; Grant, 1998). Despite its significance, a clear and precise definition of competitive advantage has been difficult to establish in the literature (Arend, 2003; Ma, 2000; O'Shannassy, 2008; Rumelt, 2003). When implementing a new business model, a business can adopt different strategies, and coupling strategy and business model analysis is crucial for protecting the competitive advantage resulting from the new business model design (Teece, 2010) [11]. Numerous scholars have emphasized that analyzing the competitive advantage of business models involves examining the interplay between various elements within those models (Benso-Rea, Brodie, & Sima, 2013; Morris, Schindehutte, & Allen, 2005; Tikkanen, Lamberg, Parvinen, & Kallunki, 2005; Teece, 2010; Schneider & Patrick, 2013). When this interaction possesses strategic specificity, it becomes challenging for competitors to replicate, thereby serving as a source of strategic competitive advantage (Morris et al., 2005)

[12]. Teece (2010) has even more clearly proposed that interactions emerge from business models, and the isolation mechanism prevents imitators, thus becoming a source of competitive advantage within business models.

In 2006, Pohle argued that business model innovation is a promising approach for firms to adapt to changing sources of value creation during times of high environmental volatility. This highlights the need for a better understanding of the phenomenon, which has driven academic interest in the topic. Therefore, there is a need for a literature review, identification of patterns, a theoretical foundation, and a framework for guiding future research in this area (Schneider & Patrick, 2013). Based on a review of the literature, we propose a generic business model with several causally related components that enhance the total competitive advantage potential of a business model. These components, starting from the conceptual model level, include

(1) **Innovation:** Innovation is widely recognized as a critical source of competitive advantage in today's rapidly changing environment. Management scholars have identified innovation capability as the most significant determinant of firm performance (Mone, McKinley, & Barker, 1998; Dess & Picken, 2000; Tushman & O'Reilly, 1996).

2) **Resources:** The intersection of operations management and strategy is crucial in evaluating and developing the sustainability level of a firm's competitive advantage based on its resources. Resource-based theory (RBT) suggests that firms that possess valuable, rare, imperfectly imitable, and non-substitutable resources gain a competitive advantage due to heterogeneity in their distribution and imperfect mobility across firms (J. Barney, 1991).

(3) **Value:** Scholars such as Adner (2006), Carbonara (2005), Devesh and Kingshuk (2002), Gale (1994), and Suzuki and Kodama (2004) argue that adjusting organizational strategy should prioritize transferring customer value to gain an advantage. Wood (2004) suggests that in the 21st century, customer value will be the source of competitive advantage due to changing times and environments. Successful companies have managed to improve their operational performance by focusing on customer value.

(4) **Market:** A competitive market environment can motivate businesses to focus on innovation to attain a sustainable competitive advantage. This advantage is achieved when a company accurately responds to consumer demands for product quality, customer needs, new market opportunities, and product innovation. Prominent scholars such as Kohli and Jaworski (1990) and Narver and Slater (1990) have emphasized the crucial role of a firm's market-oriented behaviors in sustaining competitive advantage. By identifying and targeting the appropriate markets and developing innovative products, companies can achieve disruptive innovation and a sustainable competitive advantage.

## The 2-tier Business Model

### ***The conceptual model***

The conceptual model presented in this passage outlines the key components of a business: innovation, resources, market, and value. The model begins with innovation, which is widely recognized as a critical element of entrepreneurship and business performance. Innovation can be any new idea, business concept, or aspect of business innovation. Market analysis, competitive dynamics, and strategic planning are all important factors that can inform a business concept.

Resources are essential for creating sustainable competitive advantages, as they enable a business to deliver value to its stakeholders. The alignment of internal systems is necessary to fully realize the benefits of available resources [10]. The market is another vital component of the model, as it encompasses a range of external factors such as legal frameworks, technology, customers, competitors, and resources that impact a business's operations.

Ultimately, the objective of a business model is to create value for stakeholders. Value creation is the goal of a business model, and it is crucial for a business to identify and target customers who will benefit from its products or services. In conclusion, the conceptual model outlines how a business will use innovation to fulfill its goals, align its resources to deliver value, identify its target market, and create value for its stakeholders.

### The financial model

The purpose of a business model is to describe how a business creates value for customers, attracts customers to pay for that value, and converts those payments into profit (Teece, 2010). However, a conceptual model alone is not enough to fully represent the reality of its long-term sustainability. Therefore, a financial model, which includes cost, revenue, and profit, serves as the second tier of the two-tier business model. The cost monetizes all resources required to realize and support the innovation, and startup capital recovery time is critical for successful entrepreneurship. Revenue includes all incomes from the products or services that a business supplies. Profit is equivalent to revenue minus cost or represents a business's financial performance. In analyzing a business, profit often gains a higher profile. Both the cost and revenue affect the profit, as shown by the solid line in Figure 1. A financial model helps translate the conceptual model into numbers, enabling businesses to better reflect their financial conditions [8].

### The two-tier view

A comprehensive business model comprises a conceptual model that describes the idea of a new business and a financial model that quantifies its numbers, making it accountable and measurable. The two-tier business model is preferable as it separates conceptual and financial issues to avoid confusion while integrating both models to provide a complete view of the business. Each model demonstrates the relationships among its components, and the two-tier model illustrates the connections between the two. This study applies the Internet to realize the business model. Cost and revenue represent the monetary sides of resource and market, respectively [9]. When a business delivers value to its customers, it ideally generates enough revenue to turn a profit and remain viable (Mariotti, 2006). A win-win situation arises when customers receive value, and the business earns a profit. Dashed lines connect the two tiers of analyses, indicating the corresponding components in the conceptual and financial models. Cost, revenue, and profit correspond to resource, market, and value, respectively, in the financial model.

### The description of OTA

Lee, Qu, and Kim (2007) assert that Internet travel services leverage e-commerce technology to form a new type of tourism enterprise [3]. Their evaluation model includes the value group, product and service, resource allocation, and profit pattern. By integrating internal and external resources, enterprises can develop strategies to gain excess profits in the online tourism industry [4]. E-commerce has revolutionized the tourism industry by increasing sales and profitability, providing accessibility, around-the-clock availability, a wider selection of goods and services, and international reach [5]. Tourism suppliers and agencies benefit from reduced service costs, providing more high-quality services, and attracting customers. The evolution cycle of online travel enterprises includes the construction process, the structure process of the business model, the emergence of new business patterns, competition between old and new models, and the disintegration of the old model. The new business model undergoes pattern creativity, formation pattern structure, testing and evaluation of the business model, and ultimately achieving a scalable model. As Internet travel services continue to develop and broaden the market space, they provide more consumption options and travel experiences for tourists, creating greater value for the tourism industry.

The OTA business model represents a new era in travel agencies, transitioning from physical offices to online space. OTAs offer customers a wide range of booking services for their travels, such as hotels, car rentals, and flights. In the face of intense global competition and increasing product homogeneity, OTAs have shifted from a product-centric strategy to a customer-centric approach. The interactive nature of the internet provides opportunities and challenges for marketers to build strong customer relationships. In the highly competitive online market, the customer is the key focus for long-term success, which can be achieved by enhancing relationship quality and maintaining customer loyalty.

Currently, OTA handles the majority of hotel bookings made online. Online travel-related content platforms facilitate the sharing of travel experiences and recommendations about hotels, destinations, and points of interest, significantly influencing hotels' online reputation via electronic word of mouth of travelers. OTAs and user review aggregators play a critical role in creating economic value in the hospitality industry and

shaping the rules of competition. Infomediaries act as the least replaceable players and the guardians of quality in the value chain. They contribute to increased competition for hotels, as they reduce search costs for customers and certify quality, enabling lower prices and more extensive sales volume [6].

Moreover, the convenience and accessibility of OTAs make them a popular choice for many travelers. With just a few clicks, travelers can search for and book their travel arrangements anytime and anywhere they want, as long as they have access to the internet. This saves them time and effort in comparison to the traditional way of booking through a travel agent or directly with the airlines or hotels. Additionally, many OTAs offer mobile apps that allow travelers to book and manage their travel plans on the go, making the process even more convenient [7].

The analogy of life being like a snowball is used by Warren Buffet to highlight the importance of finding the right conditions to start and grow a business. Just like a snowball, a business needs to start with a small push from external forces, but once it gains momentum, it can grow on its own inertia.

Ctrip, a Chinese online travel platform, is an example of such a snowball. The company started in 1999 as one of many OTAs and offline travel agencies in China, but it quickly gained market share by offering a 24-hour online platform that allowed travelers to compare prices and services for a variety of travel products.

The introduction of smartphones and the shift towards individual travel in China in the late 2000s led to even more rapid growth in OTA businesses, with nearly 73% of Chinese travelers preferring to book their travel arrangements online by 2017. This shift in consumer behavior provided a unique entrepreneurial opportunity, which Ctrip capitalized on to become the leading Chinese online travel platform and one of the largest travel sites in the world.

It seems that Ctrip is focused on leveraging its size and scale advantage to provide centralized procurement and maintain a good customer experience. By using its national coverage advantage, Ctrip can focus the national volume on specific locations or islands, allowing for centralized procurement of local services and hotels. Additionally, Ctrip has launched a wide range of travel products and services through its travel super app, including air tickets, hotels, business travel management, vacation products, and more.

Ctrip's partnership with TripAdvisor is seen as a logical step in its globalization efforts, as TripAdvisor's content-based travel information and review platform complements Ctrip's powerful online booking and trading platform. Together, the two companies can provide a more complete travel experience to customers. Overall, it seems that Ctrip is focused on using its size and scale to innovate and disrupt the travel industry, while still maintaining a focus on providing a high-quality customer experience.

Based on the case study, it can be concluded that Ctrip has developed a unique and sustainable competitive advantage by focusing on online and mobile marketplaces that target small and medium-sized enterprises and other businesses in global markets. Ctrip has a near-monopoly position in the Chinese market and has taken equity stakes in selected travel providers to funnel business to its own subsidiaries or strategic partners. In addition, Ctrip has developed a comprehensive platform with community, social, and content attributes, which provides users with a one-stop super-online travel service platform. This platform has enabled Ctrip to expand its business through innovation and technology and compete in the domestic and global markets. Ctrip's distinct capabilities due to its uniqueness and scarcity in the market give it a competitive advantage, which aligns with Porter's suggestion that the performance of a firm in a competitive environment is due to its unmatched competitive advantage in that particular environment. Ctrip's strategy also aligns with Porter's three distinct strategies for gaining competitive advantage, namely low cost, differentiation advantage, and a successful focus strategy.

### III. Conclusion And Implication:

The fast pace of technological innovation has created a complex and turbulent business environment, which makes it difficult for traditional sources of competitive advantage to thrive. This demands new forms of organizing value creation that emphasize flexibility and speed and requires business model innovation to enable firms to compete successfully. Business model innovation has become a new way to conduct innovation, run strategies, and even become a subject of innovation in itself. The relationship between business models, innovation, and strategy has given rise to emerging concepts such as Business Model Innovation, Strategic Business Model, and Strategic Business Model Innovation.

This paper takes a holistic approach to analyzing business models, innovation, and strategy. It provides a self-assessment tool to help firms improve or renew their current business model and offers conceptual insights to further develop the concept of Strategic Business Model Innovation, as well as a guide to its practical application. However, empirical research is needed to validate the framework, and further quantitative and qualitative studies are necessary to gain a better understanding of the Strategic Business Model Innovation process.

The paper highlights the importance of competitive advantage for firms to achieve superior economic performance. It argues that a taxonomical framework for competitive advantage is necessary to provide practical guidance for managers to devise appropriate strategies. The framework should consider the amalgamation of different sources, strategies, capabilities, and conditions that contribute to competitive advantage. Managers need to be aware that no single factor can guarantee competitive advantage and should enlist those factors that have the highest share in superior economic performance for their organization.

The paper also discusses the evolution cycle of the business model of online travel enterprises, which involves the repeat alternately of the construction process and structure process of the business model. The structure process of the business model includes the emergence of new business profit patterns, the competition between old and new business models, and the disintegration of the old business model. The new business model undergoes the generation of pattern creativity, the formation of pattern structure, testing and evaluation of business models, and ultimately achieves the scale of the model.

The paper provides firms with a taxonomical structure of innovation three-tier business model for identifying sources of competitive advantage. It helps managers to make a checklist for gaining and sustaining competitive advantage. The framework is based on a conceptual mind map and the generalized logic on which all firms operate. The paper acknowledges that the taxonomies are not final and can be further developed. The framework serves as a guiding checklist for managers to identify the main sources of competitive advantage relevant to their firm and devise competitive strategies to gain sustainable competitive advantage.

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