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The Study of e-Business Models in Hospitality Management: Comparing Hotel Reservation Systems of Booking.com, Expedia and Agoda

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ABSTRACT

The rapid evolution of e-business models has brought about transformative changes in various industries, including the hospitality sector. The dynamic landscape of hospitality management has undergone substantial transformations with the advent of e-business models. This paper undertakes an in-depth exploration of e-business models within the realm of hospitality management, with a specific focus on three prominent online reservation systems – Booking.com, Expedia, and Agoda. Through a rigorous comparative analysis, this study aims at unraveling the intricacies of these platforms, offering valuable insights into their operational frameworks, market positioning, and strategies for customer engagement.

Adopting the business model concept and Business Model Canvas (BMC) theoretical framework, conceived for business management approach, this paper encompasses the nine building block criteria formulated by Osterwalder and Pigneur (2010). The findings highlight nuanced differentiations in the e-business models adopted by the selected platforms. While all three systems provide essential booking functionalities, their approaches to expansion, partnership networks, and customer loyalty initiatives diverge significantly. Additionally, the study unveils varying degrees of success in fostering customer trust and engagement, shedding light on the determinants influencing different types of users' preferences for particular platforms.

Furthermore, this research examines the implications of e-business models on hospitality management. It explores avenues for innovation, spotlighting areas where each platform can leverage its strengths to maintain a competitive advantage in an ever-evolving digital milieu. Moreover, it addresses challenges related to data privacy, security, and customer satisfaction that have gained prominence in the online hospitality management sphere.

By offering an extensive comparative analysis of e-business models in hospitality management, this study contributes both to scholarly discourse and practical insights for industry professionals. As e-Business continues to reshape hospitality management, comprehending the distinct strategies of platforms such as Booking.com, Expedia, and Agoda would be pivotal for stakeholders navigating this dynamic and competitive environment. This research serves as a foundational platform for future investigations and guides strategic decision-making for hospitality enterprises and online booking platform providers.

Keywords: E-Business model, hospitality management, hotel reservation system

INTRODUCTION

The ever-evolving landscape of e-business approaches has ushered in profound transformations across diverse industries, and the domain of hospitality is no exception. The realm of hospitality management has witnessed substantial paradigm shifts due to the pervasive influence of e-business strategies. This study delves deeply into the intricate interplay between e-business and hospitality management, focusing specifically on the utilization of e-business models within three key online booking systems: Booking.com, Expedia, and Agoda. The primary objective of this research is to undertake a meticulous comparison and analysis of these platforms, aiming to extract valuable insights into their operational intricacies, market positioning, and customer engagement strategies.

The hospitality management landscape has undergone profound metamorphosis owing to the infusion of e-business strategies. This study undertakes a comprehensive inquiry into the symbiotic relationship between e-business and hospitality management, with a focused examination of three prominent online reservation systems: Booking.com, Expedia, and Agoda. The primary objective of this research is to intricately compare and analyze these platforms, thereby extracting invaluable insights into their operational modalities, market positioning, and strategies for customer engagement.

Guided by the imperative to advance the theoretical and practical comprehension of digital business models within the analyzed sector, this research probes three fundamental questions:

RQ 1: What are the pivotal distinctions underpinning various digital business models, and what factors precipitate these

disparities?
RQ 2: What are the core characteristics inherent to digital business models operating within these specific segments?
RQ 3: Do these segments share common service providers, or are they catered to by distinct entities? Then, what factors influence these choices?

The dedicated exploration of these research questions seeks to illuminate the increasingly pivotal role of digital business models, profoundly shaping the terrain of tourism and hospitality. These models not only impact the field's dynamics but also facilitate more sustainable business practices compared to conventional models, particularly in the realm of resource utilization and consumption patterns.

This endeavor also aspires to enrich the literature in entrepreneurship and strategic management by delving into the fundamental tenets of prevalent digital business models. Furthermore, the study aims to decipher the contrasting dynamics between a prominent mainstream hospitality segment and a niche counterpart, unraveling the intricate drivers that underscore such distinct trajectories. As such, the study endeavors to bolster both theoretical and practical insights into the bedrock of digital business models, steered by an exploratory research methodology.

To fulfill these ambitions, the ensuing sections of this paper traverse a comprehensive review of existing knowledge in both segments. This is succeeded by a lucid exposition of the research methodology employed, culminating in the presentation of pertinent findings. Subsequently, a meticulous comparison between the two segments is drawn, paving the way for cogent conclusions.

Employing a comprehensive blend of methods, this study merges quantitative data analysis with qualitative exploration. The quantitative facet encompasses a range of metrics, encompassing factors like user adoption rates, booking volumes, and customer satisfaction indicators, garnered from a diverse spectrum of lodgings. Simultaneously, the study delves into the unique attributes that set each platform apart, delving into aspects such as user-friendliness, pricing mechanisms, and supplementary offerings.

The findings spotlight nuanced differentiations in the e-business models embraced by these selected platforms. While all three platforms facilitate booking services, their strategies for expansion, partnership networks, and fostering customer loyalty diverge significantly. Moreover, the study unveils disparities in their success rates in building customer trust and fostering sustained engagement, providing insights into the factors influencing users' preferences for specific platforms.

Beyond this, the research delves into the transformational influence of e-business models on the broader hospitality landscape. It unearths novel pathways for innovation, pinpointing domains where each platform can harness their strengths to maintain a competitive edge within the dynamic digital environment. Additionally, the study addresses challenges tied to data privacy, security, and customer contentment—now pivotal factors in the realm of online hospitality management.

This study serves as a guiding light for scholars and practitioners in the hospitality industry, offering comprehensive insights as e-business continues to reshape the landscape. In an era of rapid change and intense competition, comprehending the operational dynamics of platforms such as Booking.com, Expedia, and Agoda becomes paramount for stakeholders in this swiftly evolving ecosystem. This research lays the foundation for further inquiries and aids decision-making for hoteliers and online booking platform providers alike.

LITERATURE REVIEW

The contemporary digital landscape has sparked a paradigm shift in business models across industries, prominently evident in the hospitality sector. This literature review delves into the realm of e-business models within hospitality management, with a specific focus on conducting a comparative analysis of three renowned reservation systems: Booking.com, Expedia, and Agoda.

The foundational importance of business models is highlighted by Härting, who stress their role as blueprints for organizational functioning (Härting et al., 2018). While multiple interpretations of business models exist, a cohesive understanding emerges from an array of scholarly viewpoints (Massa, 2017; Zott, 2011; Fielt, 2014). Although a universally accepted definition remains elusive, consensus centers on core elements. For this paper's scope, we adopt a succinct interpretation: a business model delineates an organization's method of delivering user value and generating revenue. This definition resonates with prevailing perspectives and encapsulates the essence of business models. Among available frameworks for scrutinizing business model traits, the business model canvas (BMC) gains prominence. Originating from Osterwalder and Pigneur's seminal work (Osterwalder, 2010) which draws on Osterwalder's earlier dissertation (Osterwalder, 2004), this canvas offers a comprehensive schema for dissecting and analyzing business models. Widely embraced in academia and corporate spheres, the BMC's theoretical and practical utility underscores its integration into this study to dissect business model characteristics and compare digital business models in the examined segments.

Digital business models, fueled by information and communication technologies, diverge substantively from traditional counterparts (Voigt, 2015). The transformative potential of digital technologies facilitates novel value propositions and operational modalities across business model components. Remane et al. (Remane, 2017) emphasize specific differentiators, including the minimal marginal costs of digital business models and the amplifying network and platform effects. Härting et al. (2018) extend this notion, shedding light on resource efficiencies, process enhancements, cost reductions, production flexibility, and accelerated product introductions as hallmarks of digital business models. Brousseau and Penard (2007) illuminate the composite nature of digital business models, incorporating platform roles of intermediation, assembling, and knowledge management—a trifold dynamic evident in online travel agencies.

Digital business models challenge entrenched presumptions of conventional models, notably those centered on physical locales and human interactions for customer satisfaction (Weill, 2013). The transformation extends to core business processes, organizational roles, and data utilization—a pivotal resource within the enterprise ecosystem. The resulting process optimization contributes to resource rationalization while concurrently reshaping consumption patterns, aligning with sustainability principles.

Shaughnessy (2016) defines digital platforms as commercial networks enabling interactions among participants. Creatively harnessed, such platforms engender market disruption and confer formidable competitive edges. However, misconceptions about platforms pervade the business landscape. Muzellec et al. (2015) underscore the essence of dual value propositions: catering to customers and service providers. A two-sided market dynamics prevails, necessitating equilibrium between user groups to leverage network effects—a symbiotic cycle where user influx attracts providers and vice versa. Notably, digital platforms can encompass dual or multi-sided orientations, giving rise to interconnected "business ecosystems," pivotal for platform success. Ecosystem leadership entails orchestrating mutual value propositions and navigating intricate relationships (Muzellec, 2015).

Tourism, an early adopter of digital transformation, capitalizes on the sector's intrinsic attributes—intangibility, remote engagement, and information-rich context (Crnojevac, 2010). The advent of information and communication technologies has reconfigured the tourism landscape, spawning novel opportunities and challenges (Ruiz-Gómez, 2018; Mihajlovi´c, 2015; Elliot, 2010). Digital tourism, a cornerstone of this evolution, engenders new business models and prompts a paradigm shift in understanding tourism's underpinnings (Reinhold, 2017). These digital business models span the entire tourist journey—preparation and reservation, consumption, and post-experience evaluation phases—providing seamless access to information, enhancing experiences, and fostering post-trip engagement. Notably, online travel agencies like Booking.com, Expedia, and Agoda spearhead the evolution, facilitating convenient accommodation bookings (Dutta, 2017; Karlsson, 2017).

Accommodation booking, a pivotal phase of the tourism journey, embodies complexity (Jensen, 2018; Sjekavica, 2017). Successful digital service providers employ sophisticated strategies. Virtual communities play a pivotal role in tourists' decision-making, with TripAdvisor serving as a notable influencer. User-generated content within these communities shapes perception and choices, underlining its significance for accommodation providers. Coopetition—a concurrent blend of cooperation and competition—characterizes the hospitality sector (Bilbil, 2018). Horizontal and vertical coopetition dynamics manifest, wherein hotels collaborate with platforms while concurrently competing for direct bookings.

This literature review casts light on the landscape of e-business models in hospitality management, underscored by a detailed comparative analysis of Booking.com, Expedia, and Agoda. The profound influence of digital technologies on the tourism domain emerges, reshaping customer experiences and recalibrating industry norms. The accommodation booking segment, a focal point of this inquiry, reveals the intricate interplay of digital platforms, user-generated content, and coopetition dynamics. As the hospitality landscape continues its digital journey, deeper exploration into these e-business models stands imperative for researchers, practitioners, and industry stakeholders alike.

The Business Model Concept and Business Model Canvas (BMC) theoretical framework, conceived for business management, have gained prominence since the 1990s. This framework, applied to internet services and digital businesses, describes the blueprint adopted by businesses for internal and external value creation (Zott, Amit, & Massa, 2011). Teece (2010) defines a business model as an internal and external framework for comprehending and producing stakeholder value. It serves as a conduit for delivering customer needs and monetizing them into enterprise returns and profits. Three perspectives—value creation, value proposition, and value capture—form the basis for business growth within this framework.

Debates persist within the literature, addressing the absence of a universally accepted global definition that integrates business model elements (Shafer, Smith, & Linder, 2005). The discourse also delves into whether business models are static or dynamic (Demil & Lecocq, 2010). The business model's role in representing and developing strategic choices to foster enterprise and customer value is significant (Shafer et al., 2005). The Business Model Canvas (BMC) is a versatile tool adopted by both scholars and practitioners due to its flexibility. Comprising nine building blocks or quadrants, BMC was crafted by Alexander Osterwalder and Yves Pigneur to facilitate comprehensive business model analysis.

Notably, the business model's framework plays a pivotal role in developing and executing organizational strategies (Richardson, 2008). This study concentrates on formulating a sustainable digital BMC for the tourism and hospitality sector.

The research scrutinizes the application of the BMC, as conceptualized by Osterwalder and Pigneur (2010), within Hotel Leisure Group, examining its compatibility with international hotel reservation systems Agoda and Booking.com.

Within the BMC framework, customer segments encompass different organizational groups targeted by the company for service. Customers are the lifeblood of enterprises (Osterwalder & Pigneur, 2010), underscoring the significance of customer segments in aligning product specifications with needs.

Among market models, the multi-sided market stands out, accommodating companies with multiple customer segments interdependent on one another. This model requires satisfying the demands of diverse segments, exemplified by newspapers offering free copies to readers while relying on advertisements for financing (Osterwalder & Pigneur, 2010).

The Value Proposition block encompasses products and services generating value for the Customer Segment. A company's value proposition underpins customer purchasing decisions, addressing their problems and desires. Value propositions tailor offerings to specific customer segments, which can entail innovation or augmentation of existing offerings (Osterwalder & Pigneur, 2010).

METHODOLOGY

The Business Model Concept and Business Model Canvas (BMC) theoretical framework, conceived for business management, have gained prominence since the 1990s. This framework, applied to internet services and digital businesses, describes the blueprint adopted by businesses for internal and external value creation (Zott, Amit, & Massa, 2011). Teece (2010) defines a business model as an internal and external framework for comprehending and producing stakeholder value. It serves as a conduit for delivering customer needs and monetizing them into enterprise returns and profits. Three perspectives—value creation, value proposition, and value capture—form the basis for business growth within this framework.

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The forthcoming research dissertation adopts the nine building block questions of the business model formulated by Osterwalder and Pigneur (2010). Notably, the business model's framework plays a pivotal role in developing and executing organizational strategies (Richardson, 2008). This paper concentrates on formulating a sustainable digital BMC for the tourism and hospitality sector. The research scrutinizes the application of the BMC, as conceptualized by Osterwalder and Pigneur (2010), examining its compatibility with international hotel reservation systems, such as Agoda, Expedia, and Booking.com.

The forthcoming conference paper adopts the nine building block criteria formulated by Osterwalder and Pigneur (2010):

1) Key Partners: Identify customers and vendors and their contributions to goal attainment.
2) Key Activities: Outline primary business activities for realizing value propositions.
3) Key Resources: Identify essential assets for value creation and business sustainability.
4) Value Propositions: Define value propositions (goods and services) aligning with customer needs.
5) Customer Segments: Analyze existing and potential market segments.
6) Channels: Determine avenues for product and service delivery to customers.
7) Customer Relationships: Expound on acquiring and retaining customers, fostering revenue growth.
8) Cost Structure: Outline primary cost elements of the enterprise.
9) Revenue Streams: Identify revenue sources.

FINDINGS AND DISCUSSION

Analysis of Agoda Platform's E-business Model in Hospitality Management

In recent years, the remarkable competition common among hotel booking firms, with Agoda standing out as a key participant, can be ascribed in part to Agoda's amazing growth trajectory. Agoda began as an e-commerce firm in Singapore in 2005 and

quickly grew into one of the world's fastest-expanding online travel booking platforms. Currently, the corporation has the status of an international conglomerate, with a vast network that includes an astounding assortment of 2 million properties spread across more than 200 nations worldwide. Zentner, 2022).

Within the context of hospitality management, the e-business model adopted by Agoda introduces several distinctive features and strategies that contribute to its success. One of these strategies is the Agoda Growth Program (AGP), a comprehensive marketing initiative tailored to enhance visibility, production, and revenue for partner hotels within the Agoda platform and beyond. Additionally, Agoda presents customers with two distinct options for settling their accommodation expenses: the Agency Model and the Merchant Model. Under the Agency Model, customers directly remit payment to hotels for

accommodations, while the Merchant Model allows accommodation costs to be incorporated into comprehensive travel packages. While accommodations under the Merchant Model may appear discounted, Agoda maintains predetermined income margins. To stimulate bookings, Agoda employs promotional offers, catering to the ongoing demand for valuable and efficient services. This commitment to consistent, high-quality service not only fosters customer satisfaction but also nurtures enduring supplier-customer relationships. As trust and contentment grow, these relationships solidify, particularly in the presence of reliable service delivery. Agoda's reputation rests on its unwavering dedication to impeccable service and its proactive approach to addressing any lapses, ensuring customer needs are met. Consequently, Agoda emerges as the preferred choice for novice Filipino travelers seeking trustworthiness and familiarity (Decena, 2022).

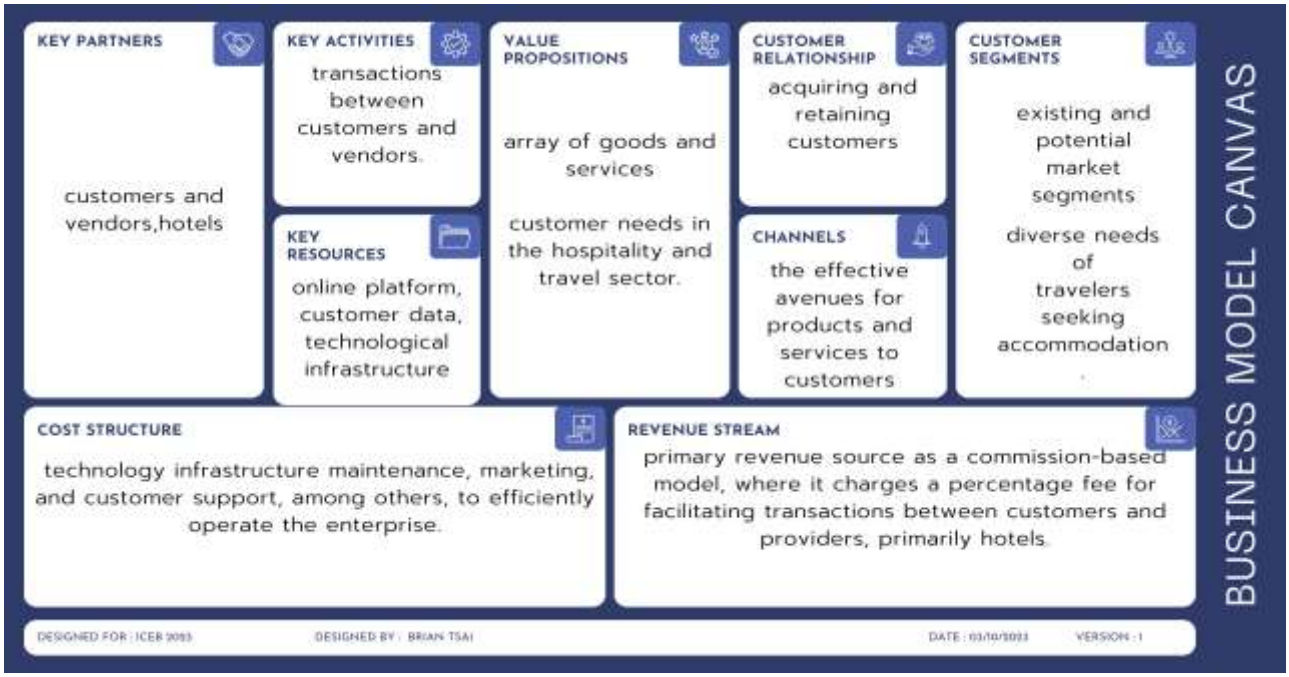
Agoda's stance as an innovation pioneer extends beyond its e-business model to encompass its leadership and organizational structure. Recognizing the inevitability of challenges, Agoda acknowledges its limited expertise in crucial areas, especially technology and digital transformation. To counter these limitations, Agoda embarks on a restructuring journey, harnessing the potential of Artificial Intelligence (AI) and machine learning advancements. Although Agoda's backend processes exhibit technological integration, untapped opportunities remain to maximize technology for frontend operations. The design of Agoda's website, while compact, may overwhelm users and potentially lead to transactional errors or frustration. This aspect, while significant, underscores the need for technical and financial resources to support continuous improvement and the alignment of customer expectations. Concurrently, Agoda grapples with inefficient inventory and cash-flow management, revealing a disparity between backend technological integration and these operational challenges (Decena, 2022).

To address these intricacies and challenges, Agoda is poised to capitalize on strategic adjustments. With web design constantly evolving in alignment with graphic design trends, Agoda can elevate the aesthetics and structure of its web content and design, enhancing user experience. Introducing flexibility in customer options, encompassing diverse package inclusions, price ranges, a broader spectrum of hotel accommodations, and transportation services, can amplify customer engagement. Moreover, Agoda can explore offering customers the ability to customize accommodations by integrating activities and transportation providers. Incorporating a cancellation option with an appropriate penalty fee can further enhance the customer journey. Diverse promotions, discounts, and complimentary offerings can effectively capture and retain customer interest, propelling Agoda's continued success (Decena, 2022).

Business Model Concept and Business Model Canvas of Agoda

In examining Agoda's business model, we turn to the nine building block questions as formulated by the Business Model Canvas framework, as Table 1 below.

Table 1. Business Model Canvas of Agoda



Source: This study.

Key Partners: Agoda identifies its primary collaborators as customers and vendors, each playing a crucial role in achieving its objectives. Customers seek accommodation, while vendors, such as hotels, contribute to the platform's mission by providing lodging options.

Key Activities: Agoda outlines its primary business activities as the facilitation of transactions between customers and vendors. These activities are geared towards realizing value propositions.

Key Resources: Essential assets, including a robust online platform, customer data, and technological infrastructure, form the foundation for Agoda's value creation and long-term sustainability.

Value Propositions: Agoda defines its value propositions as the array of goods and services it offers, meticulously aligned with customer needs in the hospitality and travel sector.

Customer Segments: Agoda diligently analyzes both existing and potential market segments to cater to the diverse needs of travelers seeking accommodation.

Channels: Agoda determines the most effective avenues for delivering its products and services to customers, optimizing user experience.

Customer Relationships: Agoda places great importance on acquiring and retaining customers, as it is essential for fostering revenue growth and sustaining its marketplace model.

Cost Structure: Agoda outlines its primary cost elements, which include technology infrastructure maintenance, marketing, and customer support, among others, to efficiently operate the enterprise.

Revenue Streams: Agoda identifies its primary revenue source as a commission-based model, where it charges a percentage fee for facilitating transactions between customers and providers, primarily hotels.

Agoda operates within the competitive realm of Online Travel Agencies (OTAs) and predominantly employs a commission-based marketplace business model. Under this model, Agoda charges a commission for each transaction facilitated through its platform. When a customer pays for a reservation, Agoda manages the payment process and deducts a percentage fee.

The key challenge in this marketplace model lies in delivering value to both customers and providers, notably hotels. Agoda must ensure that customers perceive value in using its platform, or they might choose to book directly with hotels. Conversely, if hotels do not derive value from listing their offerings on Agoda, they may opt for independent operations. This challenge underscores a limitation within Agoda's business model.

In the OTA industry, three primary business models are prevalent: advertising, agency, and the marketplace model. While these distinctions might seem complex, OTAs fundamentally serve as aggregation platforms. They thrive in highly fragmented industries where numerous companies compete, and no single entity dominates. A deeper exploration of these models and their implications will be presented in the subsequent section on competitors.

Agoda's revenue generation relies exclusively on the marketplace business model. In essence, Agoda functions as a third-party intermediary, reselling travel accommodations such as hotel rooms, vacation packages, and more. Guests make payments to Agoda at the time of booking, and Agoda subsequently settles with the hotels after the guest's stay is completed. To illustrate, consider the following example of the marketplace business model in action: Agoda procures hotel rooms and subsequently offers them to travelers, managing the transaction process.

Analysis of Expedia Platform's E-business Model in Hospitality Management

The investigation into e-business models within the realm of hospitality management unveils a comparative scrutiny of prominent hotel reservation systems, involving Booking.com, Expedia, and Agoda. This study aims to dissect the intricate dimensions of these platforms' operational frameworks, shedding light on their distinct characteristics and strategic approaches.

When scrutinizing the Business Model Canvas (BMC) of Expedia, it becomes evident that the foundation of its operational structure lies within a linear value chain. This configuration is characterized by suppliers and providers of tourist services on the input side, from whom Expedia procures capacities at favorable wholesale prices. On the opposite end of the spectrum, tourists engage with Expedia to procure tourist products or packages at retail prices. Despite Expedia's digital nature, facilitated by online communication and sales channels, and its robust technological infrastructure, its business model is reminiscent of traditional models embraced by tourism intermediaries. It is worth noting that this linear value chain has, over time, demonstrated limitations in Expedia's expansion trajectory, particularly when compared to its primary competitor,

Booking.com. The latter has embraced a more scalable and versatile two-sided platform business model, propelling it to an advantageous position (Zentner, 2022).

In summary, this investigation delves into the intricate e-business models employed in hospitality management, with specific focus on Booking.com, Expedia, and Agoda. The analysis endeavors to uncover the strategic nuances that differentiate these platforms, offering valuable insights into their approaches to digital business in the realm of hotel reservation systems.

Business Model Concept and Business Model Canvas of Expedia

In this analysis of Expedia's business model, we employ the nine building block questions as delineated by the Business Model Canvas framework, as Table 2 below.

Table 2: Business Model Canvas of Expedia



Source: This study.

Key Partners: Expedia identifies its primary partners as customers and vendors, recognizing their significant contributions to the achievement of its objectives. Customers seek travel services, while vendors, such as airlines, hotels, car rental companies, and other travel providers, play a pivotal role in fulfilling travel bookings.

Key Activities: Expedia outlines its primary business activities, which revolve around realizing its value propositions. These activities encompass technological platform development, partnership negotiations with travel providers, pricing and inventory management, as well as customer acquisition and retention strategies.

Key Resources: Essential assets, including a robust technology infrastructure, data analytics capabilities, strategic partnerships, and a strong brand reputation, are pivotal for Expedia's ability to create value and sustain its business over time.

Value Propositions: Expedia defines its value propositions by offering travelers the convenience of accessing a wide range of travel options, loyalty programs, and facilitating the growth of other travel companies. Additionally, Expedia's platform attracts increased customer traffic and revenue for its partners.

Customer Segments: Expedia meticulously analyzes both existing and potential market segments to cater to the diverse needs of leisure and business travelers seeking travel services and experience.

Channels: Expedia determines the most effective channels for delivering its products and services to customers, encompassing its website, mobile app, partnerships with other travel companies, search engine optimization, and online advertising.

Customer Relationships: Expedia nurtures customer relationships through email marketing, social media engagement, responsive customer support, and user-generated content and reviews. These relationships are instrumental in acquiring, retaining, and fostering revenue growth from customers.

Cost Structure: Expedia outlines its primary cost elements, which include technology development and maintenance, marketing and advertising, employee salaries and benefits, partnerships with travel providers, and customer support and payment processing, to operate the enterprise efficiently.

Revenue Streams: Expedia identifies its primary revenue sources, which include reselling travel packages, commission fees on bookings, and advertising. These revenue streams form the core of its financial sustainability.

Expedia has been a trailblazer in the online travel industry for over 25 years. Its business model, centered around providing a comprehensive travel platform where travelers can seamlessly search and book flights, hotels, and other travel reservations, has been instrumental in its success. By aggregating travel options in one place, Expedia encourages many travelers to use its platform for convenient travel booking. Expedia's proprietary technology platform is a key resource, enabling user-friendly online booking and reservation management. The company's dedication to technology has allowed it to continually enhance the user experience and offer innovative products and services. Recent updates focusing on working with consumers throughout their trips, rather than solely on booking volume, underscore Expedia's commitment to delivering a personalized travel experience. While competition from other online travel agencies and travel search engines exists, Expedia's strong brand recognition, vast inventory of travel options, and emphasis on technology confer a competitive edge. Expedia's ability to adapt to evolving consumer preferences and travel trends will be pivotal to its sustained success in the future.

Analysis of Booking.com Platform's E-business Model in Hospitality Management

Booking.com distinguishes itself through the adept implementation of the Agency model, facilitating direct customer transactions with hotels, ensuring transparency, and eliminating additional costs. The presentation of prices for the entire stay rather than per day contributes to customer clarity and prevents misinterpretation. A notable feature, the Genius program, serves as a strategic incentive for business partners, offering amplified visibility on the Booking website, alongside guaranteed upgrades and breakfast perks. The company's ability to navigate a regulated business landscape is underscored by its establishment of robust connections with lobby groups and political networks, enabling adherence to regulations. Booking.com's portfolio encompasses a wide array of accommodation choices, granting customers diverse options spanning prices and accommodation types. These attributes have solidified Booking.com as a preferred choice for both domestic and international travelers, firmly establishing its reputation (Decena, 2022).

However, Booking.com confronts substantial challenges, particularly in the realm of technology and digital transformation. In a parallel trajectory with Agoda, Booking.com initiates procedural reconfiguration to leverage the potential of artificial intelligence (AI) and machine learning advancements. Respondents have pointed to a cluttered web design on Booking.com, potentially causing information overload and confusion for users. Despite the existence of numerous patents and copyrights, Booking.com's replicable business model lacks the adaptability and malleability required to withstand imitation by competitors. The company's internal focus on delivery-centric project management may inadvertently sideline external stakeholder interests, potentially harming its public image and customer relationships (Decena, 2022).

In response to these imperatives, Booking.com has the opportunity to align its approach with the evolving trends of web design, facilitating a more user-friendly experience through a streamlined interface. Expanding the reach of the Genius program to untapped partners within the Philippines can foster increased promotional offers and discounts, enhancing customer engagement. The integration of novel payment options, such as nationality-based bank transfers, aligns seamlessly with Booking.com's strategic embrace of AI and machine learning. Comparable to Agoda, Booking.com is confronted by external threats, including competition from alternative online booking platforms and the fluctuation of hotel rental prices, all of which pose challenges to the platform's sustainability. Additionally, the prevailing travel restrictions pose a formidable challenge to Booking.com's continued success. As the landscape evolves, Booking.com must capitalize on its strengths, tackle challenges proactively, and seize opportunities to sustain its standing as a frontrunner in the hospitality management domain (Decena, 2022).

Business Model Concept and Business Model Canvas of Booking.com

In this examination of Booking.com's business model, we apply the nine building block questions as defined by the Business Model Canvas framework, as Table 3.

Key Partners: Booking.com identifies its primary partners as both customers and vendors, recognizing their integral roles in achieving the company's objectives. Customers seek accommodations, while hotels and lodging providers contribute significantly to Booking.com's goals.

Key Activities: Booking.com outlines its primary business activities, which are aimed at realizing its value propositions. These activities primarily involve facilitating the booking process between customers and hotels.

Key Resources: Essential assets such as its online platform, vast customer data, and technological infrastructure are identified as fundamental resources that enable Booking.com to create value and maintain business sustainability.

Value Propositions: Booking.com defines its value propositions by offering a range of goods and services meticulously aligned with the diverse needs of customers and hotels within the hospitality industry.

Customer Segments: Booking.com meticulously analyzes both existing and potential market segments to cater to the diverse requirements of travelers seeking accommodations and hotels looking to fill their rooms.

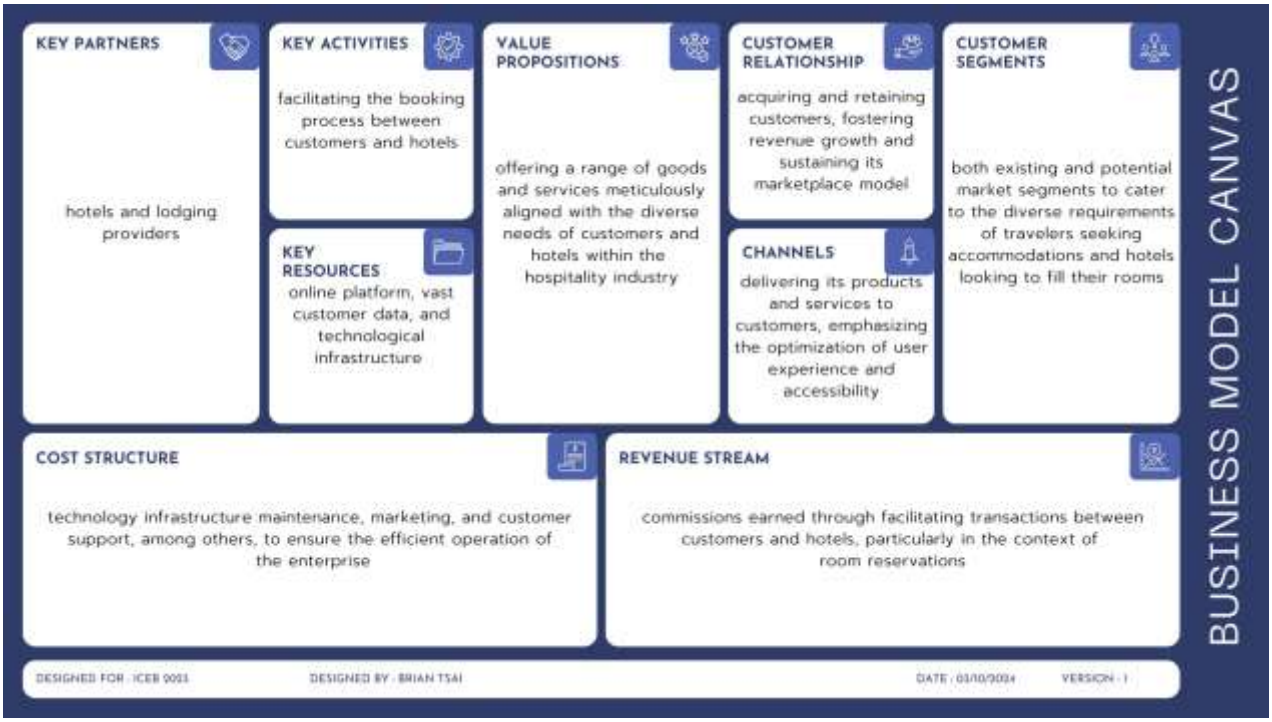
Channels: Booking.com determines the most effective channels for delivering its products and services to customers, emphasizing the optimization of user experience and accessibility.

Customer Relationships: Booking.com places significant emphasis on acquiring and retaining customers, recognizing the pivotal role this plays in fostering revenue growth and sustaining its marketplace model.

Cost Structure: Booking.com outlines its primary cost elements, including technology infrastructure maintenance, marketing, and customer support, among others, to ensure the efficient operation of the enterprise.

Revenue Streams: Booking.com identifies its primary revenue sources, which predominantly stem from commissions earned through facilitating transactions between customers and hotels, particularly in the context of room reservations.

Table 3: Business Model Canvas of Booking.com



Source: This study.

The Analysis of E-business Models of Booking.com, Expedia and Agoda

While comparing Booking.com, Expedia and Agoda, despite all being hotel reservation systems with demand aggregator platforms, there are notable differences. A key distinction lies in their geographic exposure. Expedia primarily caters to customers in the United States, generating most of its revenue from this region. On the other hand, Booking.com operates mainly in Europe, while Agoda's focus is predominantly in Asia. Another differentiation is observed in the adoption of single or multi-brand approaches. Expedia's structure comprises various website properties acquired over time, including Hotels.com and Travelocity. In contrast, Booking Holdings and Agoda generate a significant portion of their revenue from their main website platforms. Over the long term, this divergence in strategy might influence Expedia's online business trajectory. Having a unified website strategy can lead to a larger market share, as demonstrated by Booking.com and Agoda, with a substantial portion of their traffic originating directly from users. Consequently, Booking and Agoda's website strategy is more effective (Lo, 2021).

Agoda addresses the challenge of hotels losing customers due to user-unfriendly booking platforms and travelers seeking better deals without the complexity of comparing individual hotel bookings. Thus, Agoda's mission is to facilitate easy and affordable hotel bookings in Asia for global customers, providing value and a user-friendly experience. Agoda and other hotel reservation systems provide a market-driven solution by offering a platform for both hotels and customers to engage. Agoda's platform lists available hotels based on customer requirements, directly connecting customers with hotels. This transparent information empowers customers to make informed choices. Simultaneously, hotels benefit from increased customer reach, particularly independent ones. Agoda employs a marketplace model, allowing it to acquire hotel rooms in bulk and offer competitive prices. Additionally, 'The Illusion of Choice' or 'self-competition' strategy is implemented by Agoda and Booking.com. This strategy creates the perception of price competition between these platforms, though ultimately both are under Booking Holdings, maximizing revenue for the parent company (Lo, 2021).

For instance, the estimation of the Malaysian hotel booking hotel reservation industry's market size involves multiplying the number of available hotel rooms by the total revenue per room, assuming a 15% commission. The calculation includes the total number of available rooms per day, the total revenue per room, and the assumption that rooms are booked for 70% of the year. By multiplying these values, the market size is derived. Agoda is recognized as highly profitable, particularly in the Asian

context. This profitability stems from its marketplace business model, where low costs contribute to sustaining healthy revenue and profit margins. Even during periods of slower revenue growth, Agoda's ability to adjust marketing expenses enables maintaining profitability. Agoda's scalability is notable due to its marketplace model, which keeps labor costs low and focuses on marketing. Expansion relies on customer acquisition and reaching new geographical regions. Agoda's growth potential is tied to both economic conditions and its ability to expand to new markets (Lo, 2021).

Agoda is a reputable booking site, known for its user-friendly experience and attractive cancellation policies. The company's management team boasts extensive experience, ensuring the company's success. Its brilliant leadership plays a crucial role in Agoda's growth. Agoda was founded by Michael Kenny and Robert Rosenstein in 2005, and it was acquired by Booking Holdings in 2007. While specific revenue figures are not provided, it's estimated that Agoda's revenue is substantial, given its position as one of the top-performing hotel reservation systems in Asia. Agoda exhibits strong startup traction with consistent growth in customers and revenue, despite the challenges posed by the COVID-19 pandemic. This growth showcases Agoda's ability to consistently meet benchmarks and maintain a solid sales channel over time (Lo, 2021).

The Comparison of Business Model Canvas of Booking.com, Expedia, and Agoda

Table 4: The Comparison of Business Model Canvas of Booking.com, Expedia, and Agoda



Source: This study.

Key Partners

Booking.com: Customers and hotels are Booking.com's primary partners. They work closely with hotels to list their properties and offer accommodations to travelers.
Expedia: Customers and various travel providers such as airlines, hotels, and car rental companies are key partners for Expedia.
Agoda: Agoda also relies on customers and hotels as key partners, similar to Booking.com and Expedia.

Key Activities

Booking.com: Booking.com's main activities involve facilitating the booking process between customers and hotels. They focus on connecting travelers with suitable accommodations.
Expedia: Expedia engages in technological platform development, partnership negotiations, pricing and inventory management, and customer acquisition and retention strategies.
Agoda: Agoda primarily facilitates transactions between customers and hotels, aiming to provide value to both parties.

Key Resources

Booking.com: Key resources for Booking.com include its online platform, customer data, and technological infrastructure.
Expedia: Expedia relies on a robust technology infrastructure, data analytics capabilities, strategic partnerships, and its strong brand reputation.
Agoda: Agoda also emphasizes its online platform, customer data, and technological infrastructure as essential resources.

Value Propositions

Booking.com: Booking.com's value proposition focuses on helping hotels fill vacant rooms efficiently, react to market dynamics, reach a global audience, reduce risk, drive additional website traffic, and provide market intelligence.
Expedia: Expedia offers travelers convenience, loyalty programs, and facilitates the growth of other travel companies while increasing customer traffic and revenue for its partners.
Agoda: Agoda aligns its value propositions with the needs of customers and hotels in the hospitality industry, ensuring a range of goods and services are offered.

Customer Segments
Booking.com: Booking.com targets both travelers seeking accommodations and hotels looking to fill their rooms. Expedia: Expedia caters to leisure and business travelers seeking various travel services and experiences.
Agoda: Agoda serves travelers seeking accommodation and hotels in the hospitality sector.

Channels
Booking.com: Booking.com focuses on optimizing the user experience and accessibility of its platform.
Expedia: Expedia utilizes various channels, including its website, mobile app, partnerships, SEO, and online advertising.
Agoda: Agoda also emphasizes optimizing user experience and effective product delivery channels.

Customer Relationships
Booking.com: Booking.com places significant importance on acquiring and retaining customers to foster revenue growth and sustain its marketplace model.
Expedia: Expedia nurtures customer relationships through email marketing, social media engagement, responsive customer support, and user-generated content.
Agoda: Agoda, like the others, values customer acquisition and retention to drive its revenue growth.

Cost Structure
Booking.com: Key cost elements for Booking.com include technology infrastructure maintenance, marketing, and customer support.
Expedia: Expedia's primary cost elements encompass technology development and maintenance, marketing and advertising, employee salaries, partnerships, and customer support.
Agoda: Agoda's cost structure includes technology infrastructure maintenance, marketing, and customer support, similar to Booking.com and Expedia.

Revenue Streams
Booking.com: Booking.com primarily earns revenue through commissions from facilitating transactions between customers and hotels.
Expedia: Expedia generates revenue through reselling travel packages, commission fees, and advertising.
Agoda: Agoda's primary revenue source is a commission-based model, charging a percentage fee for facilitating transactions between customers and hotels.

In summary, Booking.com, Expedia, and Agoda share several similarities in their business models, as they all operate within the online travel agency industry. They connect travelers with accommodations, earn revenue through commissions, and prioritize customer acquisition and retention. However, each platform has its unique value propositions and strategies to differentiate itself in the competitive market. Booking.com, for example, focuses on helping hotels optimize their revenue and provides market intelligence, while Expedia emphasizes convenience and partnerships with travel providers. Agoda, on the other hand, aims to align its offerings with the specific needs of its customer and hotel segments.

CONCLUSION AND IMPLICATIONS

In the rapidly evolving landscape of hospitality management, e-business models have ushered in transformative changes, reshaping the way hotels and travelers interact. This paper conducted an in-depth exploration of the e-business models in the context of hotel reservation systems, focusing on three prominent platforms: Booking.com, Expedia, and Agoda. Through a rigorous comparative analysis, this research unraveled the intricacies of these platforms, shedding light on their operational frameworks, market positioning, and strategies for customer engagement.

The findings of this study revealed nuanced differences in the e-business models adopted by Booking.com, Expedia, and Agoda. While all three platforms offer essential booking functionalities, their strategies for expansion, partnership networks, and customer loyalty initiatives diverge significantly. The study also highlighted variations in the success of building customer trust and engagement, providing insights into the factors influencing users' preferences for specific platforms.

The implications of this research extend to both academia and industry professionals. For scholars, this study enriches the understanding of e-business models within the hospitality sector, offering insights into the distinctive strategies of Booking.com, Expedia, and Agoda. The comparative analysis provides a comprehensive view of their approaches, aiding future research on digital business models and their impact on the hospitality industry.

For industry professionals, this research serves as a strategic guide. The analysis of these platforms' strengths, challenges, and opportunities offers practical insights that can inform decision-making. By comprehending the operational dynamics and strategies of Booking.com, Expedia, and Agoda, stakeholders in the hospitality industry can navigate the evolving landscape more effectively. As e-business models continue to shape the hospitality sector, this research provides a foundation for adapting to technological advancements, meeting customer expectations, and remaining competitive.

By way of conclusion, the paper has explored the innovative e-business models for hotel reservation systems in hospitality management. The research of e-business models in hospitality management, as exemplified by Booking.com, Expedia, and Agoda, holds significance for understanding the intricate interplay between technology, customer engagement, and business strategies. This research contributes to the ongoing dialogue on digital transformation in the hospitality industry and paves the way for future explorations and adaptations in this dynamic and evolving landscape.

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