



Digital transformation is a mechanism to enhance the competitiveness of institutions – a case study of the Airbnb platform

التحول الرقمي آلية لتعزيز تنافسية المؤسسات -دراسة حالة منصة Airbnb

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Abstract

Digital transformation has become a critical pathway for organizations seeking to sustain their market position and strengthen competitiveness. Beyond the mere adoption of digital tools, it involves a comprehensive organizational shift that integrates advanced technologies, data-driven decision-making, and process automation to enhance efficiency, responsiveness, and innovation. This transformation enables cost reduction, improves decision quality, and supports the development of customer-centric products and services, thereby reinforcing long-term competitive advantage. Accordingly, this study explores digital transformation and its role in enhancing organizational competitiveness, using the Airbnb platform as a representative case of digitally driven success.

Keywords

Digital Transformation;
Organizational Competitiveness;
Competitive Analysis; Airbnb Platform;

JEL Classification Codes O33 ; L25 ; L40 ; Z30

الكلمات المفتاحية

الملخص

أصبح التحول الرقمي مسارًا بالغ الأهمية للمؤسسات الساعية إلى الحفاظ على مكانتها في السوق وتعزيز قدرتها التنافسية. فهو يتجاوز مجرد تبني الأدوات الرقمية، إذ ينطوي على تحول تنظيمي شامل يدمج التقنيات المتقدمة، واتخاذ القرارات القائمة على البيانات، وأتمتة العمليات لتعزيز الكفاءة والاستجابة والابتكار. يُمكن هذا التحول من خفض التكاليف، وتحسين جودة القرارات، ودعم تطوير منتجات وخدمات تتمحور حول العملاء، مما يعزز الميزة التنافسية طويلة الأجل. وبناءً على ذلك، تستكشف هذه الدراسة التحول الرقمي ودوره في تعزيز القدرة التنافسية للمؤسسات، مستخدمةً منصة Airbnb كمثال نموذجي للنجاح الرقمي.

التحول الرقمي؛ تنافسية المؤسسات؛ تحليل المنافسة؛ منصة Airbnb

تصنيف JEL: O33 ; L25 ; L40 ; Z30

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I.INTRODUCTION:

Digital transformation represents a paradigm shift in how organizations operate, integrating digital technologies into all aspects of their processes and activities. It is no longer merely a luxury option, but a strategic imperative to ensure survival and growth in a rapidly evolving business environment.

The problem:

From here, the following problem can be raised:

How can digital transformation enhance the competitiveness of organizations?

This problem leads to the following sub-questions:

- ✓What is digital transformation?
- ✓How can organizations accelerate their digital transformation?
- ✓What is organizational competitiveness, and how can organizations enhance their competitive position?
- ✓What is Airbnb, and what has it done to gain a significant market share in the digital transformation era?

Hypotheses:

To answer these questions, we start from the following hypotheses:

- ✓Digital transformation is an enterprise-wide initiative that utilizes digital technologies to revamp core operations and launch innovative offerings. This approach enhances customer engagement, empowers the workforce, optimizes internal functions, and ultimately generates measurable financial returns
- ✓Competitive advantage is, therefore, the greater attractiveness of any product or service produced by a particular enterprise to a significant group of consumers within a given market.
- ✓The competitive landscape of an industry is shaped by five fundamental forces: the intensity of rivalry among established firms, the threat of new market entrants, the threat of substitute products or services, the bargaining power of buyers, and the bargaining power of suppliers.
- ✓The idea for Airbnb began in 2007 when two hosts welcomed three guests into their San Francisco home. Since then, the company has grown to over 5 million hosts who have welcomed more than 2 billion guests in nearly every country around the world. Every day, hosts offer unique accommodations and distinctive travel experiences that allow guests to build connections with communities built on trust and authenticity.

Importance of the study:

The importance of this study stems from the significance of its variables. Digital transformation is a topic of great interest, as most organizations, if they don't adopt it as an option, are forced to do so by circumstances. Conversely, organizations that embrace digital transformation are the ones that enjoy competitiveness in the market; Airbnb is a prime example.

Study Objectives:

This research paper aims to:

- ✓ Highlight digital transformation and how organizations adopt it
- ✓ Examine organizational competitiveness through competitive forces analysis
- ✓ Introduce Airbnb as a highly competitive organization embracing digital transformation

II. THEORETICAL FRAMEWORK AND PREVIOUS STUDIES:

Every organization's journey toward digital transformation is unique. It may start with a narrowly focused technology project or launch as a comprehensive, organization-wide effort. The scope can vary widely—from integrating digital tools and solutions into current processes and products, to fundamentally reimagining those processes and products, or even generating completely new revenue streams through the use of emerging technologies.

1. Digital transformation and artificial intelligence:

Digital transformation is a business strategy initiative that incorporates digital technology across all areas of an organization. It evaluates and modernizes an organization's processes, products, operations and technology stack to enable continual, rapid, customer-driven innovation.

A. Digital transformation:

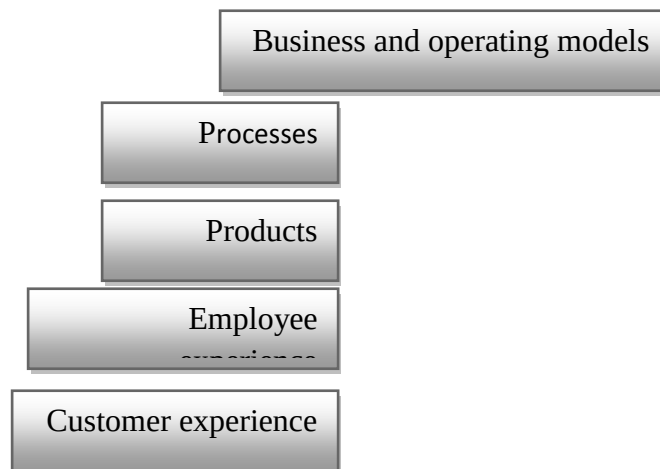
Digital transformation extends beyond merely replacing analog processes or updating IT systems; it fundamentally involves business transformation and effective change management. Although initiatives are often spearheaded by the chief information officer (CIO), successful digital transformation requires alignment across the entire executive team, with a focus on adopting new technologies and data-driven approaches to enhance customer experience, empower employees, and achieve organizational objectives) O'Brien.(2025 ‘

At its core, digital transformation represents the integration of digital technologies across all facets of an organization, fundamentally altering operational practices and the ways in which value is delivered to customers. It also entails a cultural shift, where organizations must continuously challenge established practices, embrace experimentation, and accept iterative failure as part of the process. (CÖSTER, 2023)

Strategically, digital transformation seeks to modernize key business processes and introduce innovative services that improve engagement with customers, support workforce effectiveness, optimize operations, and ultimately generate measurable business value. When fully embedded into organizational strategy, it requires commitment from the CEO, the executive team, and employees alike, fostering a mindset of continual reinvention that is essential for sustaining competitive advantage.) Pratt(2024 ‘

Digital transformation initiatives typically focus on specific domains or organizational levers, which serve as the primary targets for change and innovation.

Figure (01): Digital transformation domains



Source: (Prepared by the researcher based on the data).

B. Benefits of digital transformation:

Experts and organizations credit digital transformation with everything from improved supply chain and resource management to significant gains in overall productivity, profitability and competitive advantage. Some of the most frequently cited benefits include: (Laurens, 2019)

-Improved customer satisfaction and loyalty:

Organizations can drive greater customer satisfaction and retention by leveraging digital technology to transform the customer experience. Key strategies include enabling seamless engagement across any device or channel, providing round-the-clock service via chatbots, and delivering personalized content tailored to each interaction. These elements are central to building stronger, more resilient customer relationships in the digital age.

-Rapid, continual innovation:

The goal of digital transformation is to enable continuous innovation across products and processes. This is achieved through a hybrid multicloud infrastructure, which provides access to leading-edge digital tools, combined with Agile and DevOps practices that allow for their swift integration into development workflows.

-Greater resilience to change:

The inherent adaptability and nimbleness that fuel swift innovation equally empower an organization to adapt more promptly to shifts in consumer needs, emerging market prospects, and competitive pressures. Initially, digital transformation empowered new entrants to overhaul established sectors; now, it equally equips established entities to counter potential disruptors with speed and efficacy.

- Optimized workflows and operational efficiency:

As a consequence of their digital evolution, entities can leverage digital solutions to establish more refined and efficient workflows, procedures, and foundational systems. By integrating automation

and artificial intelligence, organizations can minimize repetitive manual duties, thereby allowing key personnel to dedicate greater attention to customer interactions and stakeholder engagement.

- Enhanced employee involvement:

The shift to digital operations can elevate staff engagement through multiple avenues. This ranges from equipping teams with modern tools and technologies to fostering an environment that champions agile innovation, where experimentation, calculated risk-taking, rapid iteration, and continuous learning are promoted. Recent comprehensive research analyzing the link between engagement and organizational results indicates that businesses with more engaged employees demonstrate markedly superior performance across various metrics, including reduced absenteeism and enhanced sales productivity and profitability.

- Improved security posture:

The process of digital transformation can reveal vulnerabilities in older technological systems or current security protocols that may expose an organization to danger. Implementing contemporary security solutions enables an entity to more effectively identify and address threats, decrease the incidence of successful breaches, and avert or limit associated harm.

- Diversified income sources:

Integrating advanced technologies into a company's digital assets opens avenues for generating additional income. This includes revenue from online platforms, mobile applications, enhanced sales via automated assistants, and similar channels. Artificial intelligence and advanced analytics can pinpoint potential offerings by examining customer online activity and purchasing trends. Furthermore, consumers often show a preference for businesses that provide a wider array of digital transaction methods.

C. Digital transformation technologies

Digital transformation is supported by a wide range of digital technologies that collectively enable organizations to modernize operations, enhance flexibility, and create new forms of value. While digital transformation does not depend on a single technological solution, certain technologies play a central role in driving transformation initiatives and supporting long-term strategic change (Highsmith, 2020)

-Cloud computing:

Cloud computing represents one of the most significant enablers of digital transformation, as it allows organizations to access advanced technological resources while maintaining cost efficiency and scalability. By adopting cloud-based infrastructures, firms can store and process large volumes of data, deploy applications more rapidly, and adjust computing capacity in response to fluctuating demand. Hybrid cloud models, which combine public and private cloud solutions, offer organizations greater flexibility, improved system interoperability, and enhanced agility, thereby supporting sustained digital transformation efforts.

-Mobile technology:

The widespread use of mobile devices has fundamentally transformed how organizations interact with customers and deliver services. Mobile technologies have not only enhanced accessibility and convenience for users but have also driven the emergence of new business models and digital services. Through mobile applications, organizations can offer real-time services, facilitate transactions, and maintain continuous engagement with customers. As customer expectations increasingly revolve around mobile access, organizations are compelled to integrate mobile solutions into their core digital strategies.

-Internet of Things (IoT):

The Internet of Things (IoT) refers to interconnected devices equipped with sensors that collect and transmit data through digital networks. These technologies bridge the gap between physical assets and digital systems by generating real-time information that can be analyzed to support operational decisions. IoT applications contribute to process optimization, predictive maintenance, and automation across various sectors. When combined with data analytics and artificial intelligence, IoT enhances organizational efficiency and supports more informed decision-making.

-Artificial intelligence (AI) and machine learning:

Artificial intelligence (AI) and machine learning constitute key drivers of digital transformation by enabling systems to analyze data, recognize patterns, and perform complex tasks with minimal human intervention. These technologies support automation, personalization, and predictive analysis across multiple organizational functions, including marketing, customer service, and operations. AI-driven applications allow organizations to enhance service quality, improve responsiveness, and allocate human resources to higher value-added activities, thereby reinforcing overall organizational performance.

2. Corporate competitiveness:

Corporate competitiveness refers to an organization's ability to achieve and sustain a favorable position within its market by delivering products and services that satisfy customer requirements in terms of quality, price, and diversity. Competitiveness is closely linked to the firm's capacity to develop and maintain competitive advantages that stem from internal capabilities as well as from its ability to adapt to external environmental conditions.

From an organizational perspective, competitiveness reflects the firm's efficiency, productivity, adaptability, and strategic orientation. Organizations that effectively leverage technological innovation and managerial capabilities are better positioned to differentiate themselves from competitors and respond proactively to market pressures. In this regard, digital transformation plays a decisive role in strengthening corporate competitiveness by enhancing internal processes and enabling firms to exploit new strategic opportunities.

A. The concept of organizational competitiveness:

Organizational competitiveness constitutes a dynamic and multifaceted phenomenon that extends beyond short-term market performance to encompass a firm's long-term capacity to generate, sustain, and renew competitive advantages under evolving market conditions. It reflects an

organization's ability to efficiently mobilize and coordinate its tangible and intangible resources in order to deliver superior value propositions, combining quality, innovation, and cost efficiency within both domestic and international competitive arenas. In this sense, competitiveness is not a static attribute but a continuous strategic process shaped by learning, adaptability, and strategic renewal.) COMĂNESCU (2018 ,

Competitiveness is intrinsically linked to the notion of competitive advantage, which arises when a firm succeeds in differentiating its offerings in ways that are valued by a significant segment of consumers and difficult for competitors to replicate. This differentiation may stem from product attributes, technological capabilities, organizational routines, or relational assets, allowing the firm to enhance customer loyalty and secure a more defensible market position. Consequently, competitive advantage functions as the operational expression of competitiveness, translating strategic capabilities into observable market outcomes)BENAHCENE(2019 ,

From a macroeconomic standpoint, the World Economic Forum (2017–2018) conceptualizes competitiveness as the aggregate outcome of institutional quality, policy frameworks, and structural determinants that shape productivity at the national level. However, limiting competitiveness to the national scale overlooks the critical role played by meso-level configurations, such as regions, industries, and clusters. At this intermediate level, competitiveness emerges from collective efficiency, knowledge spillovers, and coordinated interactions among firms, public institutions, and supporting organizations. These collaborative structures foster innovation, reduce transaction costs, and enhance resilience, thereby reinforcing both individual firm performance and broader economic competitiveness) Zuñiga.(2019 ,

B. Competitive environment analysis:

The competitive environment represents a central analytical dimension in strategic management, as it defines the constraints and opportunities within which firms formulate and implement their strategies. Michael Porter's five forces framework remains one of the most influential models for analyzing industry structure, owing to its systematic identification of the fundamental drivers of competitive intensity. Despite variations in market configurations and technological contexts, the model provides a robust foundation for understanding how competitive pressures shape firm behavior and performance.

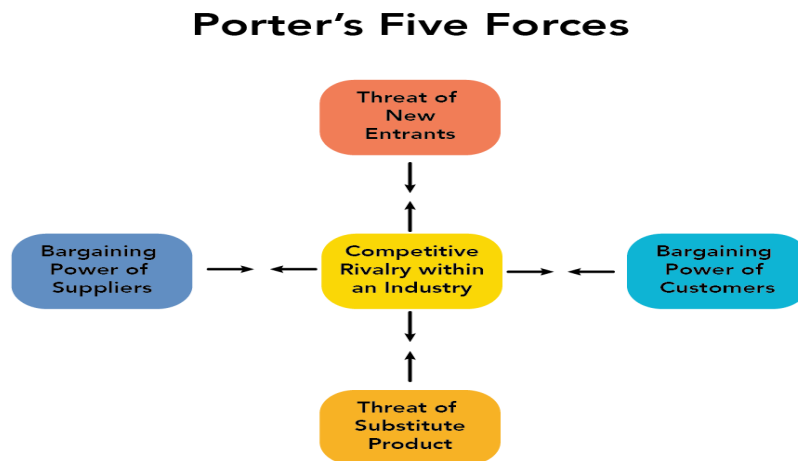
Industry rivalry is influenced by the number and strategic symmetry of competitors, cost structures, and rates of innovation, often manifesting through aggressive pricing strategies, product differentiation, and continuous service improvement. The threat of new entrants is conditioned by entry barriers such as economies of scale, capital requirements, regulatory constraints, and brand loyalty, which determine the extent to which incumbents are exposed to competitive disruption. Substitute products exert pressure by limiting pricing power and forcing firms to continuously enhance the value of their offerings. Meanwhile, the bargaining power of customers and suppliers reflects asymmetries in information, switching costs, and resource dependence, all of which directly affect profitability and strategic flexibility.

In increasingly dynamic markets, firms cannot rely solely on customer orientation; instead, systematic competitor intelligence has become a strategic necessity. Organizations must

continuously identify existing and emerging competitors, evaluate their strategic intentions, and assess their resource endowments and vulnerabilities. Such analysis enables firms to anticipate competitive moves, mitigate risks associated with technological change, and exploit strategic gaps within the industry.

Building on this perspective, Kotler's classification of competition offers a nuanced understanding of competitive boundaries. Brand-level competition captures direct rivalry among firms offering comparable products to similar customer segments. Industry-level competition broadens the scope to include all producers within the same product category. Formal competition further extends the competitive set to all firms addressing the same consumer needs, while generic competition encompasses the widest arena, where firms compete for consumers' disposable income across industries. This multi-level framework highlights the importance of adopting a holistic view of competition, particularly in markets characterized by convergence and innovation-driven disruption . (Zack, 2025)

Figure (02): Porters Five Forces



Source: (Michael E. Porter, "How Competitive Forces Shape Strategy", *Harvard Business Review*, May 1979 Vol. 57, No. 2. P5).

c. Approaches of Organizational Competitiveness

There are many approaches that work to enhance the competitiveness of institutions, each operating according to its own perspective.

The industry-based model analyzes the competitiveness at the firm level from the perspective of industry conditions that could generate competitive advantages and the Resource Based View examine competitiveness from the internal attributes and resources of a company as the way for achieving superior performances. Every stream research comprehends factors that may influence organizational competitiveness through the interaction with internal and external conditions.

The following table will review the most important curricula.

Table (01): Approaches of Organizational Competitiveness

Model	Description	Attributes	Authors
Industry-based perspective	The model focuses on industry-base factors, analyzing how competitiveness is developed and strategically achieve. The model come from the traditional competitive analysis, which focus the attention to external factor or industry factors as a way of obtaining competitive advantages. Competitive strategies are the result of understanding the rules of competition of an industry. In recent studies, focuses also in analyzing the value-chain (Bai & Sarkis, 2012; Bruno, Esposito, Genovese & Simpson, 2016), considering the importance of its management as a way to obtain competitive advantages in the industry.	Porter as one of the main contributors of this proposal. The author argued that competitiveness depends about the interaction of the five forces model. The five forces analyses external factors in the industry like entry barriers, power or influence of clients and supplies, rivalry among competitors or product substitutes. From the value-chain is necessary to examine from the suppliers to the final client, in order to understand the value proposal. The model analyzes a positionbased competition where competitiveness is led by the ability of maintaining and improving the position of the company from actual or potential competitors in the industry.	porter (1980, 1985); Bai &Sarkis, (2012); Bruno, Esposito, Genovese & Simpson, (2016).
A Resourcebased approach	A resource based approach focus on internal recourses or attributes of a firm, and comprehends competitive positions as the efficacy on the use and interaction of specific capabilities or resources. From this approach is analyzed the firm"s capital (Physic, human and organizational) which contributes as determinants of competitive advantages. According to Barney (1991, p.102) a firm have competitive advantages if "it is implementing a value creating strategy not simultaneously being implemented by any current or potential competitors".	From the resource based approach, there are four attributes necessities for obtaining competitive advantages: *Valuable: Strategies implemented by the company needs to improve effectiveness. *Rare: Company resources that are not available to competitors. *Imperfectly imitable: it is difficult to imitate recourses of the company. *Non-substitutable: high difficulty for replacement. The model analyze the competitiveness form a possessionbase competition where it depends of the possession of firm recourses.	Barney (1991)
Action-based	The action-based perspective analyzed	This perspective analyzes	Madhok &

perspective of competition	the competitiveness from the entrepreneurial orientation and the agility that a firm may have, in order to respond and adapt faster to competitive and changing markets that makes competitive advantages obsolete. According to Madhok & Marques (2014) “the ABP is instead value-driven in that the opportunities sensed and acted upon must offer a novel value proposition to the customer” (p.78) For Eisenhardt and Martin, cited by Madhok & Marques (2014) “Competing on action is more akin to the notion of dynamic capabilities” (p.79	competitiveness from a more dynamic nature, it does not focus on position in the industry of possession of recourses as a source of competitiveness, also does not focus on specific internal or external factors. The model is oriented to action, the agility of the strategy, if focuses on the activities that a company perform for creating value while assemble the recourses needed. Analyze the way company acts (activities and actions) where sense opportunities in a market.	Marques (2014)
Game theoretic models	Some contemporary approaches analyses strategy from tactical plans, understanding the strategy of competition as a game.	These type of models do not focus on resources or industry factors as the previous approaches. Game theoretic models analyses the tactics used against competitors.	Veliyath & Fitzgerald, (2000)

Source: Alexander Zuñiga-Collazos,(2019), **Organizational Competitiveness: The Conceptualization and Its Evolution**, Journal of Tourism and Hospitality Management, Vol. 7, No. 1, pp197 198.

III.METHOD AND PROCEDURES:

This section presents an overview of the Airbnb platform, highlighting its origins, scope of activities, and core value proposition within the global digital tourism ecosystem.

A. Introducing the Airbnb platform:

Airbnb emerged in 2007 as a peer-to-peer accommodation concept when its founders hosted a small number of guests in their residence in San Francisco. Since that initial initiative, the platform has evolved into one of the world’s largest digital marketplaces for hospitality, bringing together more than five million hosts and over two billion guest stays across nearly all countries worldwide. The platform facilitates interactions between hosts and guests by enabling access to diverse lodging options and locally rooted travel experiences, thereby fostering community-based tourism grounded in trust and authenticity.

The accommodation offerings on Airbnb range from modest rural homes to high-end urban residences, allowing the platform to address a wide variety of travel purposes, including business trips, short leisure stays, family vacations, and long-term accommodations. This diversity enables Airbnb to cater to heterogeneous consumer preferences while expanding its presence across multiple market segments.

Beyond lodging, Airbnb has diversified its value proposition by integrating experience-based services delivered by local hosts. These experiences are designed to provide guests with immersive

cultural, artistic, culinary, and outdoor activities, thereby extending the platform's role from a booking intermediary to an enabler of experiential tourism. In addition, Airbnb offers personalized services such as private chefs and wellness-related services, which enhance the overall travel experience and contribute to customer satisfaction.

Trust and safety constitute a central pillar of Airbnb's platform governance model. The company implements multi-level verification mechanisms for hosts, guests, accommodations, experiences, and services, supported by secure communication systems and reliable digital payment infrastructure. These measures aim to reduce information asymmetry and transaction risks commonly associated with platform-based exchanges.

Furthermore, Airbnb provides continuous operational support through a global customer service system available 24/7 and accessible in multiple languages. The platform also offers comprehensive protection programs, including insurance coverage and damage protection for hosts, as well as liability insurance for experiences. Collectively, these mechanisms reinforce platform reliability, strengthen stakeholder confidence, and support Airbnb's long-term sustainability in the highly competitive digital hospitality industry.

B. Analysis of the Airbnb platform industry fabric:

Airbnb operates under a business model commonly identified in economic literature as a multi-sided platform (MSP). In this configuration, the firm functions as an intermediary that facilitates interactions between distinct but interdependent user groups. Specifically, Airbnb's platform mediates exchanges between guests seeking short-term lodging and hosts offering underutilized residential space for temporary rental. Beyond these two primary user groups, the platform ecosystem also incorporates complementary actors, such as professional photographers, whose services enhance the quality and visibility of listed accommodations and thereby contribute to the overall value creation process.

Importantly, Airbnb's emergence was not initially grounded in a sophisticated theoretical understanding of multi-sided platform dynamics. Instead, the platform evolved through an incremental and experiential learning process. The company originated from a pragmatic response to accommodation shortages, when its founders offered temporary sleeping arrangements in their own apartment. Early interactions with users revealed that the platform's potential extended well beyond low-cost lodging solutions. Over time, Airbnb developed into a system capable of delivering distinctive and personalized travel experiences, largely enabled by local hosts' contextual knowledge and social engagement with guests.) Rochet(2003 ,

Value proposition:

Airbnb's value proposition is structured around the differentiated benefits offered to its key stakeholder groups. For **hosts**, the platform provides an opportunity to monetize idle space, access a global customer base, and benefit from digital tools that facilitate pricing, visibility, and trust. For

guests, Airbnb delivers flexible accommodation options, competitive pricing, and access to authentic local experiences. In addition, **auxiliary service providers**—including photographers and other support actors—derive value from participation in the platform’s ecosystem by offering complementary services that reinforce the core interactions between hosts and guests.

Overall, these value propositions have remained largely stable over time, with only incremental extensions and refinements introduced during the period between 2017 and 2020, as discussed in subsequent sections.

Table (02): Airbnb Value Proposition

Hosts	Guests	Third parties
Identify suitable guests	Find accommodation	Find and engage with new clients
Mitigate risk	Offer convenient booking	
Handle monetary transactions	Mitigate risk	
Maximize revenue	Augment experience	
Administer the short-term rental		
Connect with like-minded hosts		

Source: Stephan Reinhold,(2021), **The evolution of Airbnb’s business model**, The University of Queensland, p13

Proposition to hosts:

Hosts’ participation in Airbnb’s platform is primarily driven by the need to access a reliable market of potential guests willing to pay for temporary use of their space. However, host motivations are heterogeneous and extend beyond purely financial considerations. These motivations may include optimising returns on property investments, generating primary or supplementary income, offsetting maintenance costs of secondary residences, utilising under-used assets, or pursuing social interaction through engagement with guests.

Regardless of these underlying motivations, individual hosts face substantial barriers in attracting demand independently, as visibility and trust are critical prerequisites in short-term accommodation markets. While hosts may attempt to promote their properties through personal websites or informal channels, such approaches lack the scale, credibility, and transactional efficiency offered by a global digital platform. Between 2008 and 2016, Airbnb developed a multifaceted value proposition for hosts that addresses these constraints. The platform provides extensive market exposure by connecting listings to a large and geographically diverse user base, reduces uncertainty associated with hosting unfamiliar guests, facilitates secure payment processing, and manages a range of administrative functions related to bookings and communication. In addition, Airbnb enables hosts to engage with a broader community of users, thereby supporting knowledge sharing, experience exchange, and network learning effects.

Perceived risk constitutes one of the most significant concerns for hosts when granting access to their private property. Airbnb's risk-reduction mechanisms are therefore a central element of its host-side value proposition. The platform enforces identity verification for all users and operates a bilateral review system that allows hosts to assess prospective guests based on feedback from previous hosting experiences. Over time, guests accumulate a digital reputation in the form of peer-generated evaluations, which functions as a signalling mechanism that reduces information asymmetry and enhances trust. Complementing these reputational safeguards, Airbnb offers a host protection programme that covers property damage up to USD 1,000,000 in exceptional cases. This guarantee plays a critical role in reinforcing host confidence, particularly in light of the reputational risks associated with highly publicised incidents within peer-to-peer accommodation markets.

Furthermore, as the majority of hosts lack professional experience in online retailing or digital payment systems, Airbnb's management of financial transactions represents a significant operational advantage. The platform enables guests to pay using widely adopted payment methods in their local currencies, while Airbnb oversees pricing components such as cleaning fees and service charges, processes cancellations, and administers payouts to hosts. This centralisation of financial and administrative processes substantially lowers participation costs for hosts and enhances platform usability.

Proposition to guests:

From the guest perspective, Airbnb offers a highly transparent and information-rich search environment that supports informed decision-making. Users can browse accommodation options through visual summaries, key property attributes, and interactive maps, enabling efficient comparison across listings. Each individual listing provides access to a detailed profile that typically exceeds the informational depth offered by traditional accommodation providers. These profiles include extensive photographic documentation, descriptions of property features and amenities, cancellation policies, guest reviews, and detailed house rules, such as pet and smoking policies.

In addition to property-specific information, listings are linked to host profiles and neighbourhood descriptions, often supplemented with locally embedded recommendations provided by hosts. Airbnb systematically analyses the high volume of user search data generated on the platform to detect behavioural patterns and deploy algorithmic search optimisation tools. These tools aim to match guests with listings that align closely with their preferences, thereby enhancing user experience and increasing the likelihood of successful transactions.

Value creation:

Airbnb's value creation process extends beyond bilateral host–guest interactions and encompasses a broader ecosystem of third-party contributors and business partners. Value is generated through the coordinated deployment of organisational activities, strategic resources, and user-generated inputs. Key activities refer to routinised operational practices that enable the platform to deliver its core value propositions, such as trust facilitation, transaction management, and platform governance.

Key resources, in turn, constitute the foundational assets that support these activities, including technological infrastructure, proprietary algorithms, brand reputation, and accumulated user data. Importantly, these resources are largely controlled by Airbnb and are difficult for competitors to

replicate, thereby reinforcing the platform's strategic position within the peer-to-peer accommodation industry.

Table (03): Value creation

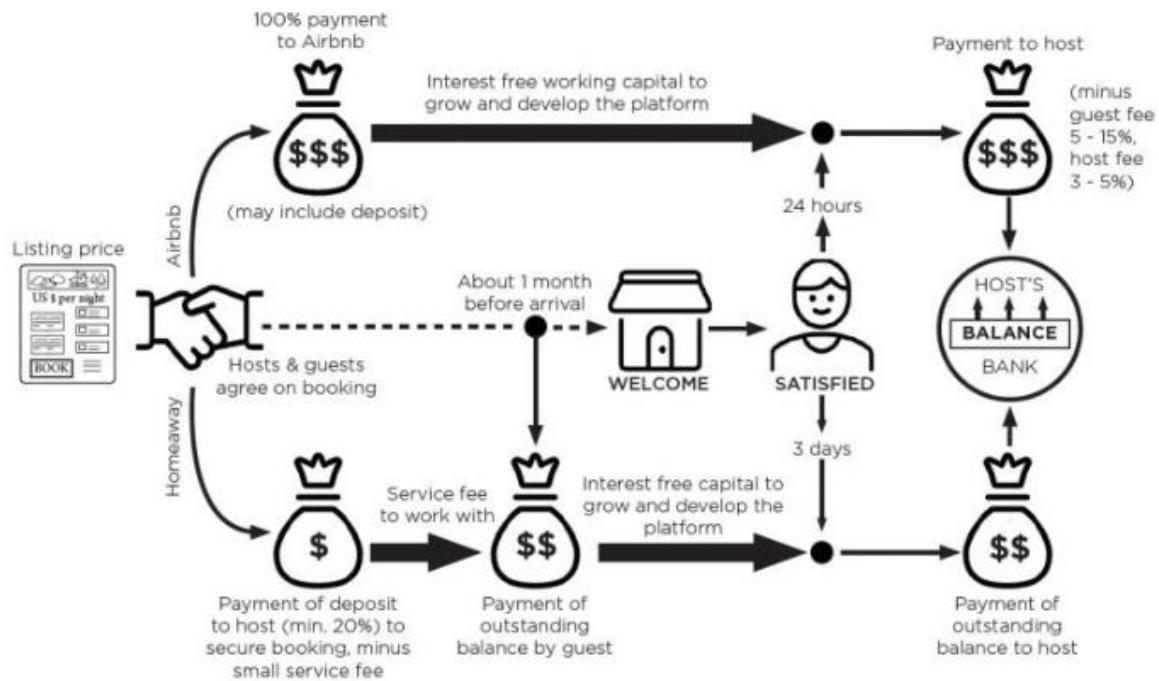
Key activities	Key resource
Growing and nurturing guest and host networks	Tailored marketplace
Search optimization to match guests and hosts	Trust-base relationships
Understanding and tracking guest and host behavior	Database of reviews tied to profiles
Building confidence by mitigating risk	Knowledge resources
Cost management	Service recovery staff

Source: Stephan Reinhold,(2021), **The evolution of Airbnb's business model**, The University of Queensland, p17

Unlike many traditional accommodation distribution intermediaries, Airbnb requires guests to settle the full booking payment at the moment of reservation. The platform withholds its service fee and transfers the remaining amount to the host only after 24 hours have elapsed following guest check-in. This payment architecture generates multiple strategic advantages for Airbnb. On the one hand, by retaining funds until after occupancy begins—assuming no formal complaints are raised—the platform reinforces trust by indirectly validating the existence and conformity of the listed accommodation. On the other hand, this system allows Airbnb to retain substantial liquidity for extended periods. In high-demand seasons, reservations are frequently confirmed up to a year in advance, enabling the platform to temporarily utilize these funds without incurring financing costs, effectively functioning as an interest-free source of capital. A comparable working-capital mechanism can be observed in large e-commerce platforms such as Amazon, where customer payments are collected prior to product delivery, allowing the firm to deploy these funds during the fulfillment interval.

Figure 3 illustrates the money flows for Airbnb and Homeaway (now VRBO) as per the first period, highlighting the benefits Airbnb derive from its model.

Figure (03): The title of the figure



Source: Stephan Reinhold,(2021), *The evolution of Airbnb's business model*, The University of Queensland, p19

C. Airbnb's digital transformation:

Airbnb functions as a digital hospitality platform that intermediates between accommodation providers and travelers through an integrated online ecosystem. Central to its operations is a mobile application that facilitates the exploration, discovery, and reservation of diverse lodging options worldwide. Through this platform, hosts are able to offer short-term rentals, while guests can access a wide spectrum of accommodation types, ranging from conventional apartments and vacation homes to unconventional offerings such as treehouses, castles, homestays, and hotel rooms.

In 2023, Airbnb entered into a strategic collaboration with the Malaysian Digital Economy Corporation (MDEC) within the framework of the DE Rantau initiative, Malaysia's first national program aimed at positioning the country as a regional destination for digital nomads. This partnership focused on identifying, curating, and promoting accommodation listings on Airbnb that comply with MDEC standards and are specifically designed to meet the functional requirements of remote workers. These designated listings provide amenities aligned with the professional and lifestyle needs of digital nomads, thereby enhancing the attractiveness of Malaysia as a long-stay destination.

Similarly, Airbnb has engaged in initiatives targeting remote work mobility in collaboration with public sector stakeholders. In December 2022, the company launched the Dubai Remote Work Hub in partnership with Dubai's Department of Economy and Tourism. This initiative was preceded by the Live & Work Anywhere program introduced earlier in 2022, which sought to identify and promote international destinations suitable for remote professionals. Through these

programs, Airbnb and its governmental partners jointly marketed Dubai as an attractive location for extended stays, offering both accommodation solutions and practical guidance for remote workers.

Artificial intelligence constitutes a core component of Airbnb's technological architecture and is embedded across multiple service layers. The company employs advanced machine learning techniques, large language models, and computer vision systems to support various operational and strategic functions. In 2023, Airbnb introduced an AI-driven photo tour feature to enhance the visual presentation of listings. During the same year, the acquisition of GamePlanner.AI further strengthened Airbnb's AI capabilities by accelerating selected innovation projects and facilitating the integration of intelligent tools into its platform. These AI applications have contributed to more informed decision-making through data-driven insights, deeper customer understanding, increased efficiency in product development via automation, and improved risk assessment and management processes.

Airbnb also relies extensively on machine learning and data analytics to deliver personalized user experiences. Recommendation systems analyze individual preferences, historical booking behavior, and search patterns to tailor accommodation suggestions, thereby increasing customer satisfaction and fostering repeat usage. In the domain of experiential offerings, Airbnb has developed a machine learning-based search and recommendation engine that ranks and suggests experiences according to users' prior interactions, including bookings, clicks, and browsing activity.

From an infrastructure perspective, Airbnb operates predominantly on cloud-based systems to support and scale its daily business activities. Cloud computing enables the company to handle large-scale data processing and analytics, operate core applications such as search, payment processing, communication, and content management, and securely store extensive digital assets, including property images and user profiles. Additionally, cloud technologies facilitate real-time monitoring of system resources and the execution of complex database operations, such as replication and dynamic scaling. By adopting a cloud-centric operational model, Airbnb has achieved greater cost efficiency, rapid scalability, and enhanced responsiveness to changing customer expectations through the continuous introduction of new digital products and services. Reinhold(2021 ,

IV. STUDY RESULTS (ANALYSIS AND DISCUSSION) :

- ✓ The results confirm that digital transformation is a comprehensive organizational strategy that relies on adopting digital technologies to modernize processes and enhance customer value. This is evident in Airbnb's case through the use of artificial intelligence, data analytics, and cloud computing to improve user experience and streamline operational processes.
- ✓ The analysis showed that competitive advantage depends on the appeal of a product or service to a broad range of consumers. Airbnb was able to build a competitive advantage by offering unique value to both hosts and guests, supported by a sophisticated digital rating and trust system.
- ✓ Michael Porter's Five Forces model was applied to analyze Airbnb's competitive environment. The analysis revealed the influence of existing competitors, the power of suppliers (hosts), the power of customers (guests), the threat of alternatives (traditional hotels), and the threat of new entrants. Digital transformation helped Airbnb stand out against these forces.
- ✓ The results confirm that Airbnb's success stems from its early adoption of a multi-party, platform-based digital model, which provided innovative, trust-based accommodation solutions connecting local communities and travelers.
- ✓ Airbnb transformed from a simple idea into a global platform thanks to its adoption of a digital business model based on sharing and trust. This enabled it to create a new marketplace that seamlessly connects supply and demand in an unconventional way.
- ✓ By leveraging technologies like artificial intelligence and machine learning, Airbnb offers personalized recommendations for guests and simplifies the search and booking process. It also provides secure payment methods and 24/7 customer support.
- ✓ The use of cloud computing and process automation has reduced operational costs and enabled the company to expand rapidly globally while maintaining service quality.
- ✓ Airbnb implemented digital systems for user identity verification, host and guest ratings, and insurance protection, which enhanced trust in the platform and mitigated transaction risks.
- ✓ Initiatives such as "Work and Live Anywhere" represented a swift response to the COVID-19 pandemic and the shift in the labor market toward remote work, demonstrating the platform's resilience and capacity for continuous innovation

V.CONCLUSION:

This study aimed to explore the role of digital transformation as a mechanism for enhancing organizational competitiveness, using Airbnb as a case study. The findings yielded several key conclusions that answer the research questions and confirm the proposed hypotheses.

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