Transformation of the hospitality services marketing structure: a chaos theory perspective

Journal:	*Journal of Services Marketing*
Manuscript ID	JSM-01-2021-0017.R3
Manuscript Type:	Article
Keywords:	service design, Transformative, Tourism, Hospitality, Internal marketing
Authors:	Hasan Evrim Arici and Levent Altinay

SCHOLARONE™
Manuscripts

Transformation of the hospitality services marketing structure: a chaos theory perspective

Abstract

Purpose – Drawing on chaos theory as an overarching approach, as well as guidelines from effectuation and transformative learning theories, this study evaluates the changing marketing channels in the hospitality industry in the wake of the COVID-19 pandemic. It also aims to develop a conceptual framework that demonstrates the transformation of the marketing structure; in particular, the transformation of hospitality organizations, employees, and customers.

Design/methodology/approach – The study utilizes the hermeneutic method and conceptually evaluates the existing actors of the services marketing structure. It also discusses how to transform this structure into the new normal in the wake of the COVID-19 pandemic.

Findings – The findings of the study demonstrated that COVID-19 has resulted in changing marketing channels in the hospitality industry. These include external, internal, interactive, and substitutional marketing channels. In response to these changes, the hospitality industry needs to adopt a more transformative marketing structure that requires the transformation of hospitality companies, employees, and customers.

Originality – This study utilizes chaos, effectuation, and transformative learning theories in order to reconceptualize the hospitality services marketing structure. The contribution of this paper lies in the conceptual pathways it suggests for transforming hospitality firms, employees, and customers and for demonstrating their transformed roles and positions in the wake of the pandemic.

Research limitations/implications – The conceptualized transformation of the services marketing structure could help hospitality practitioners, employees, and customers to understand the new normal and acquire new abilities, meanings, awareness, and learning accordingly.

Keywords: Service design; transformative; tourism; hospitality; internal marketing.

Introduction

The recent COVID-19 pandemic has posed an extraordinary threat to the world, not least to the global economy (Jiang and Wen, 2020). The tourism and hospitality sectors have been particularly badly hit (Alonso *et al.,* 2020) because of the high possibility of infection spreading in hospitality organizations (Shin and Kang, 2020). The unprecedented nature of the pandemic (Gössling *et al.,* 2020) has had a crippling impact, imposing sweeping constraints on organizations such as hotels, restaurants, cafes, and other hospitality facilities, leaving the industry to face severe and apparently insurmountable challenges (Alonso *et al.,* 2020).

The main concerns resulting from the pandemic relate to its significant financial impacts, aggravated by disruption, loss of customers, the lack of clarity over the duration of the crisis, and the socio-economic impacts on workers and their livelihoods (Alonso *et al.,* 2020). For example, the pandemic has resulted in a decline in the hospitality industry of at least 50% in comparison to the previous year in almost every country (Hall *et al.,* 2020). In the United States, for example, hotel profits declined by approximately 50% in 2020, owing to an extraordinary fall in occupancy rates (38%) (Shin and Kang, 2020). An identical impact has been found in Europe, where a monthly loss of one billion euros of tourism income is estimated (European Parliament, 2020). In a recent investigation by Longwoods International (2020) regarding customer reactions to the pandemic, 66% of US tourists stated that COVID-19 would significantly influence their holiday decisions. It is anticipated that nearly 75 million jobs will be lost from the tourism and hospitality industry (Alonso *et al.,* 2020). Worse still, it will take nearly five years for the hospitality sector to reach pre-pandemic daily occupancy rates and income (Shin and Kang, 2020). This is evidently a profound crisis that places hospitality in an exceptionally vulnerable position.

The subject of pandemic crises has attracted the attention of several scholars in the field resulting in an extant body of literature. These studies have contributed to the evaluation of crises in hospitality (e.g., Tang and Wong 2009; Rivera *et al.,* 2021) by addressing specific aspects of crisis management, mainly recovery (e.g., Kuo *et al.,* 2008; Rivera *et al.,* 2021), by or focusing on lessons learned from crises (e.g., Paraskevas and Altinay, 2013; Paraskevas *et al.,* 2013). Huang and Jahromi (2021) argued that transformation and resilience-building by hospitality organizations have become essential. Similarly, Hao, Xiao and Chon (2021) advocated that hospitality service providers should adopt a new way of thinking and operating that involves new service design, marketing, and market reshuffles. However, none of these studies – and indeed previous literature – has evaluated the transformation of services marketing structure in the hospitality industry in the wake of a pandemic. Particularly, it is yet not known how services marketing structure will take shape as a result of COVID-19 and, more specifically, how firms, employees and customers could transform themselves in response to the new changes and complexities.

This study draws upon chaos, effectuation, and transformative learning theories to evaluate the changing marketing channels in the hospitality industry in the wake of the COVID-19 pandemic. It also develops a conceptual framework that demonstrates the transformation of the marketing structure, in particular the transformation of hospitality organizations, employees, and customers in response to emergent challenges. This study adopts chaos theory (also known as 'butterfly theory'). The fundamental assumption of chaos theory is that a small shift in the state of a deterministic situation or event can have serious ramifications at a later stage (Speakman and Sharpley, 2012; Zahra and Ryan, 2007). That is, the chaos/butterfly theory suggests that a minor change in one place may create turbulence in a far-distant space. The related literature suggests that chaos theory may help the hospitality and tourism industry to establish transformational crisis management strategies. For instance,

Speakman and Sharpley (2012) emphasized how Mexico benefited from the application of chaos theory in responding to the influenza A (H1N1) crisis almost a decade ago.

The present study also draws on effectuation and transformative learning theories, which embrace new strategies that foster a transformative approach, resulting in positive shifts toward sustainable habits and generating a positive impact on individuals, organizations, and destinations (Pung *et al.*, 2020). They, therefore, provide a suitable theoretical basis for the hospitality services marketing structure. During this exceptional period, hospitality firms and individuals (e.g., managers, employees, and customers) are facing high levels of complexity and disruption, and they need to transform their operational strategies and activities.

Taking into account this background, the present study evaluates the transformation of the hospitality services marketing structure from the overarching perspective of chaos theory, while adopting the conceptual pathways of effectuation and transformative learning theories. We develop a framework that addresses the transformation of organizations, employees, and customers, using the abovementioned theories as a conceptual guide for hospitality scholars and practitioners. We adopt a hermeneutic approach, reviewing the literature to develop an extensive and a profound understanding of the field in its current context. By doing so, this paper makes a number of important contributions to the hospitality services marketing literature.

First, following the suggestions of MacInnis (2011) and MacInnis *et al.* (2020), we develop a framework that makes use of chaos, transformative learning, and effectuation theories to provide conceptual support for the post-COVID-19 recovery in hospitality. We identify the new normal and the requirements for a new framework in the hospitality marketing structure. We also emphasize the potential outcomes of the transformative framework by integrating explicit and specific examples from the industry to break the

boundary conditions in the new normal. Second, we provide insight into how businesses seek to transform their strategies in order to respond to or cope with this unparalleled situation; this will help industry stakeholders to understand and make an informed choice from the range of available options. Third, through its application of effectuation theory, which is still in its infancy, the present study makes a theoretical contribution to the discourse on effectuation in relation to the service industry, building on the initial work of Sarasvathy (2009). Fourth, this study answers recent calls for more research on novel strategies that can contribute to the development of purposeful transformative experiences in tourism and hospitality (Pung *et al.,* 2020; Soulard *et al.,* 2019). We thus emphasize that the significant gaps in the understanding of the hospitality services marketing structure provide an opportunity to find a transformative response to the current complex situation.

Theoretical background and literature review

Services marketing: current conceptual approaches

In the late 1970s, an important debate about the legitimacy of services marketing emerged. Scholars claimed that services marketing was a completely distinct field (Fisk *et al.,* 1993; Lovelock, 1979; Shostack, 1977). An early discussion of services marketing by Wyckham *et al.* (1975) investigated this claim and suggested that the taxonomy of products versus services is dysfunctional. In this connection, Lovelock (1979) argued that marketing approaches need to be expanded to involve services marketing, and Berry (1980) argued that the era of treating services marketing as a variation on product marketing had come to an end.

Services marketing scholars theorized different characteristics that were thought to distinguish services from products (Zeithaml *et al.,* 1985; Rathmell, 1974), and Shostack's (1977) milestone study transformed the services marketing domain. Shostack was the first to propose a service-oriented approach that considers service marketing as a unique and separate research area distinct from product-oriented marketing. The services marketing model relies

on a separate basis in relation to objectives and exchange procedures, and services marketing

is acknowledged to be different in theoretical terms (Furrer *et al.,* 2020; Vargo and Lusch,

2008). A service provides an interaction procedure, in that the service is what is constantly

exchanged; products support the service-supplying mechanism (Baker and Magnini, 2016).

Previous studies have confirmed this service-dominant rationale and provided

interdisciplinary support for services science (Kandampully *et al.,* 2015; Lovelock, 1983).

In the field of services marketing, the following three factors have been added to the

conventional 4Ps of marketing: people (individual actors in services marketing), procedure

(progress and stream of services), and physical conditions, since the conventional marketing

mix does not encompass executing the customer interface (Baker and Magnini, 2016;

Lovelock and Wirtz, 2011; Tansuhaj *et al.,* 1988). By integrating the 7Ps, Lovelock and

Wirtz's (2011) seminal book offers a four-part framework for developing effective services

marketing strategies: "(1) understanding service products, consumers and markets;

(2) applying the 4Ps of marketing to services; (3) managing the customer interface; and

(4) implementing profitable service strategies" (p. 28). The authors also defined services as

economic activities between two parties, indicating a value exchange between service

provider and customer.

In support of the exchange idea in the service setting, the services marketing triangle

approach was developed to analyze the triangular associations of external marketing

(company), internal marketing (human labor), and interactive marketing (guests) (Edvardsson

and Enquist, 2002) for common organizational purposes. Internal marketing emphasizes the

management and satisfaction of the workforce, whereas interactive marketing focuses on

guests and perceived excellent service (Shiu and Yu, 2010). External marketing activities

include prices, products, places, and promotion facilities between organizations and guests.

Interactive marketing calls for service companies to hire skilled and competent workers to

offer excellent service to guests during critical periods. The exchange relationship of these employees and guests has a significant role in the success or failure of service organizations (Chaouali *et al.,* 2020; Hsieh, 2018).

Our review of the literature confirms that current services marketing studies place great emphasis on workers as services marketing actors and on the exchange relationships between workers and guests as key factors affecting marketing accomplishment. More specifically, hospitality scholars have paid attention to the close interaction of employees and customers (Ariffin and Maghzi, 2012; Scott and Laws, 2006). Many scholars have recommended a personalized service based on warm and close interactions between customers and employees (Ariffin and Maghzi, 2012; Chathoth *et al.,* 2013; Lu *et al.,* 2019).

Interactions between travelers and host countries in terms of customer–employee associations have been the focus of tourism and hospitality studies (Backer, 2007). It is widely accepted that the quality of interactions between visitors and locals (residents and hospitality employees) plays a vital role in the transformative experiences that result in tourist satisfaction and permanent positive changes in behaviors and values toward the travel destination and the hospitality organization (Bimonte and Punzo, 2016). Previous studies have made a valuable contribution to the hospitality marketing literature by identifying the antecedents of customers, employees, local experiences, and satisfaction. However, to date, they have not considered the health and safety concerns of visitors, which have become a core value that cuts across and underpins global, regional, and national hospitality marketing strategies and policies. In particular, there has been no study in the context of COVID-19 that focuses on protecting the health and safety of customers as well as host communities, despite this being the top priority of service organizations, destinations, and policy-makers.

Therefore, the COVID-19 pandemic presents an opportunity for tourism and hospitality actors (both organizations and individuals) to transform their perceptions,

understanding, expectations, and attitudes. The pandemic can prompt hospitality practitioners

to adopt new operational methods, including automated service, virtual service providers, and

robots. Accordingly, hospitality scholars need to suggest alternative strategies for offering

goods and services to customers in suitable ways at the right moment, and our research

proposes an appropriate conceptual framework for that purpose.

Chaos theory and COVID-19

Chaos theory focuses on the random, complex, unstable, and dynamic character of structures

(Speakman and Sharpley, 2012). It suggests that chaotic situations can self-manage and self-

recover, with periods of order broken up by periods of rapid transformation whose direction

cannot be altered (Levy, 1994). In other words, chaotic structures have the potential to

reconstruct stability, systems, and prosperity (Doherty and Delener, 2001). Chaos theory thus

offers various approaches that can provide appropriate guidelines for responding to crises in

hospitality. Therefore, research in the context of COVID-19 needs to consider both the chaos

and complexity of the structure, and the invitation from Pappas (2019) to do so is more timely

now than ever.

Tourism and hospitality has more generally been defined as a naturally non-linear,

complex and dynamic system – *a chaos model* (Gurlek and Koseoglu, 2021; Speakman and

Sharpley, 2012). In other words, vulnerable to health and safety crises, the hospitality sector is

unstable, complicated and troublesome (Speakman and Sharpley, 2012). Crises of the

hospitality industry could therefore be better analyzed through chaos theory (McKerche,

1999). In fact, several scholars suggested that chaos theory can present significant insights

into crisis management for tourism and hospitality companies (e.g., Japutra and Situmorang,

2021; Kirk and Pine, 1998; Rivera *et al.,* 2021; Speakman, 2017). However, its applicability

to the effective management of the pandemic crisis in hospitality has yet to be completely

investigated, and the following brief review addresses this gap by offering an overarching

chaos theory-based approach to COVID-19 crisis management.

The edge of chaos

Uncertainty and transformation are natural features of organizations. Even if an organization

pursues consistency and balance, these states are fragile, and complexity is always possible.

The *edge of chaos* refers to a balance between stability and chaos in which firms can operate

as complex adaptive systems (Speakman, 2017). Organizations are situated between

disintegration (total chaos) and ossification (total stability) (Verleye and Gemmel, 2011). The

structure is continually on the edge of chaos; the butterfly effect means that even an

unimportant event can trigger a set of events that result in a crisis. In other words, a minor

change in one place may lead to turbulence over a much wider area. This is evident from the

COVID-19 pandemic, which has left nothing unaffected, either positively or negatively. For

instance, a minor change in one factor, such as the required duration of quarantine, has an

impact on several factors. Therefore, different elements which have relationships to each

other need to be considered both during and after crises (Prideaux *et al.,* 2003). This shows

the continuing relevance of Levy's (1994) suggestion that flexibility and adaptiveness are

necessary for companies to survive, because long-term estimates are almost impossible for

service organizations in complex and chaotic situations such as the COVID-19 pandemic.

Bifurcation and cosmology

Farazmand (2003) defined bifurcation as the crucial moments of transformation that an

organization's direction, character, and structure are mainly disrupted. A cosmology

component appears if individuals immediately and profoundly sense that the universe is no

longer a reasonable and regular structure. Page *et al.* (2006) suggested that marketing and

promotional activities should be decreased or postponed at this point, as maintaining ordinary

marketing activities can appear improper; conditions have altered, and a new perspective is

required. Regarding the pandemic, recent research has presented evidence of the extent of the effect of COVID-19 on customers' travel intentions, identifying an unwillingness to go on holiday, at least for the foreseeable future (Pappas, 2021). Therefore, it can be assumed that the return to tourism normality is unlikely to be as fast as the recovery from previous disruptions experienced by the industry, and that a transformative approach is therefore required.

Self-organization and strange attractors

Self-organization is a procedure whereby structure re-emerges from a random and chaotic state (Valeri and Baggio, 2020). The hospitality sector has been striving to maintain or surpass its previous performance. However, according to the concept of self-organization, a return to normal is neither plausible nor desirable (Speakman and Sharpley, 2012). Moreover, the dimension of the "strange attractor" helps to identify methods that can stimulate order from chaos. Order will emerge from a chaotic situation, provided that there remains an "island of stability" in the current chaos (Zhang *et al.,* 2021). In the current context, the COVID-19 pandemic can be considered an opportunity to innovate in terms of resources and operational strategies. The skills, capabilities, and knowledge of managers have a critical role to play in achieving such a transformation. By ensuring communication opportunities and supporting cooperative associations, supervisors themselves can be the strange attractors that will help to elicit order from chaos and create the conditions for a new order (Speakman and Sharpley, 2012).

A number of responses to the pandemic may therefore be recommended. Innovative and transformative implications reinforce the role of managers as strange attractors. Moreover, there is an urgent need for transformation of marketing and operational strategies to recover the trust of employees and customers in the viability of the firm in a post-COVID world, and marketing activities should make use of any available "lock-in effect" (Speakman

and Sharpley, 2012). As Ritchie and Jiang (2019) observed, the fundamental purpose of

revival marketing activity is to change a negative image and enhance guest demand; among

the methods they recommended are influential advertising, cooperative marketing, and private

events. In this way, the complex and chaotic nature of the pandemic can be eliminated by

deploying a major transformation in advertising and marketing activities to recover

customers' attention.

Thus, the components of chaos theory (i.e., the edge of chaos, the butterfly effect,

bifurcation and cosmology, self-organization, strange attractors, and the lock-in effect)

present an overarching perspective within a chaotic hospitality system (such as during the

COVID-19 pandemic) that can be to propose a transformative service structure. The

extent to which this represents a transformative approach to the hospitality services marketing

structure is the focus of the remainder of this paper. Specifically, the following section

identifies a reconceptualization of the services marketing structure as transformative in the

post-COVID world based on the conceptual guidelines of transformative learning and

effectuation theory.

Transformative learning and effectuation theory

An analysis of current crisis management in the hospitality field demonstrates the urgent need

to establish a framework for managing a crisis, such as COVID-19, that reflects the complex

and chaotic nature of the event (Reddy *et al.,* 2020). The pandemic, although complex and

chaotic in nature, is also an opportunity for hospitality firms to innovate to survive and to

sustain competitiveness in the market (Seyitoglu and Ivanov, 2020). Therefore, adopting a

transformation-based perspective when evaluating crises in the hospitality industry can

provide a better understanding of pandemic crisis management and planning as a response to

chaos (Reddy *et al.,* 2020).

Within the overarching perspective of the chaos theory, we first use transformative

learning theory, which has been widely adopted in the domain of adult education. A suitable

conceptual framework in which to investigate individuals' transformation and changes in their

lives (Kitchenham, 2008), it can be used to conceptually justify individuals' transformative

actions in complex and chaotic situations more generally. Originally developed by Jack

Mezirow, the theory identifies a change in an individual's perception, understanding, and

world beliefs (Mezirow, 1991). Mezirow's theory of transformative learning draws on

conscious procedures of which the individual is completely aware, and has been implemented

to create processes by which customers gain novel ideas and understanding, experience chaos,

and develop reactions (Pearce and Foster, 2007; Wolf *et al.,* 2017). These are considered as

disorienting dilemmas that facilitate transformation.

The theory of transformative learning has been much used to theorize transformative

actions in tourism (Coghlan and Weiler, 2018; Pung *et al.,* 2020; Robledo and Batle, 2017;

Soulard *et al.,* 2019; Wolf *et al.,* 2017). For example, Coghlan and Weiler (2018) described

disorienting dilemmas in tourism as crises or situations that trigger customers to find new

ways to compensate their loss. Building on Mezirow's (1991) work on transformative

learning, Wolf *et al.* (2017) developed a conceptual model that includes triggers of the

transformative process and their outcomes. They suggested four dimensions of transformative

tourism experiences: "(1) disorienting dilemma, (2) self-reflection, (3) resolution by exploring

new actions, and (4) development of new skills, attitudes and beliefs" (p. 1664). For example,

customers may experience a disorienting dilemma in the form of being confronted with the

pandemic crisis or another complex and chaotic situation. More recently, Pung *et al.* (2020)

developed a conceptual framework to describe the tourist transformation process across

various experiences. They suggested that Mezirow's theory allows tourists' experiences of

culture shock to be conceptualized as a way for them to develop a global awareness, thereby

broadening their worldview. According to the conceptual framework, customers can improve

other knowledge and capabilities by learning how to deal with chaos and complexity and by

using new technologies (Pung *et al.,* 2020).

Thus, transformative learning theory involves obtaining a broader sense of the world,

fostering novel abilities and capabilities within the new conditions (Pearce and Foster, 2007;

Pung *et al.,* 2020; Soulard *et al.,* 2019). Hence, we suppose that the theory provides a

conceptual underpinning to justify the reactions of individuals (e.g., employees and

customers) to the new complex and chaotic situation arising from the pandemic. To illustrate

this point, the pandemic and its outcomes can be considered as a triggering factor that

stimulates individuals to examine themselves, evaluate their existing positions and roles,

search for alternatives, and transform their roles and positions in the new normal. Drawing on

this theory, we argue that the ways in which individuals experience new challenges (e.g.,

COVID-19) and take the necessary precautions (Pearce and Foster, 2007) can be regarded as

occasions for transformative learning. In other words, the pandemic causes individuals to

have transformative experiences, including developing new forms of relations with others,

self-isolating, social distancing, avoiding crowded areas (e.g., resort hotels), finding

destinations or accommodation facilities that are more isolated, and adopting new-generation

technologies. Therefore, scholars should pay attention to transformative experiences based on

exceptional conditions that compel individuals to reconsider their understanding,

expectations, and world beliefs in a long-lasting and life-changing form (Kirillova *et al.,*

2017).

Despite increasing attention to the transformative perspective in tourism, there is

limited understanding of individuals' transformations in response to the pandemic. The

present study addresses this gap by developing a framework that clarifies the transformation

of hospitality employees and customers in the post-pandemic world. We also adopt

effectuation theory to underpin firms' transformation process as a reaction to the uncertainty arising from the pandemic. Effectuation has been described as a rationale of entrepreneurial ability, identified as an effective and interactive procedure of generating novel ideas in the industry (Matalamäki, 2017; Sarasvathy, 2009). Theorists of effectuation have argued that, during exceptional and uncertain times, such as the COVID-19 pandemic, practitioners embrace a rationale of decision, which is distinct from causation as accepted by the conventional approach to entrepreneurship (Mthanti and Urban, 2014). Three fundamental constructs emerge, which shareholders utilize and present as a base for effectuation: means-driven movement, affordable loss as appraisal norm, and leveraging probabilities (Arend *et al.,* 2015). Building on the conceptual foundations of effectuation theory, four key points have been developed: (1) concentrating on short-term attempts, (2) developing projects that the loss in a worst-case scenario is affordable, (3) emphasizing strategic alliances and pre-commitments from stakeholders (4) exploitation of contingencies through maintaining flexibility (Sarasvathy, 2009).

On this theoretical basis, we propose that hospitality companies should first focus on the short-term implications of the pandemic and then develop longer-term projects to compensate for the costs of the pandemic and the worst of its outcomes in the future. To do this, companies may need to adopt new approaches, such as new-generation technologies, if they are to remain flexible in their service structure and develop prompt reactions to future crises. Thus, within the overarching perspective of the chaos theory, this study provides a framework for the transformation process of hospitality organizations. It draws on effectuation theory and individual transformations (i.e., employees and customers) in terms of transformative learning theory to expand the discussion on the abovementioned theories in the hospitality literature.

Conceptualizing the services marketing structure

Drawing on the underlying principles of chaos theory, we first clarify what the new normal might look like for hospitality organizations. Second, we consider the requirements for a transformative marketing structure under those circumstances. Finally, we provide guidance for transformative actions by discussing specific examples from the transformative marketing structure for hospitality organizations in the post-pandemic world.

The edge of chaos: what the new normal could look like

Simply stated, the new normal can be defined as an event for which the pandemic acts as a catalyst, generating a series of events that bring the service industry to the edge of chaos. Unlike previous crises that resulted in short-term volatility of the financial markets, the COVID-19 pandemic has influenced organizations worldwide and had a considerable effect on global financial markets (Finsterwalder *et al.,* 2021; Huang *et al.,* 2021; Prentice *et al.,* 2021; The Khoa *et al.,* 2021). Organizations have been caught completely unprepared and left frantically searching for remedies. The deeper impact of the pandemic is likely to prove consistent and significant, raising concerns that nobody knows what the dangers of the new normal will be, how many service organizations will be affected, or how long the recovery will take (Ali *et al.,* 2021; Kabadayi *et al.,* 2020). Such concerns may generate a chaotic system that results in the re-establishment of stability and order in distribution, management, and service delivery systems; for example, organizations may adopt online marketing strategies and deliver restricted services that take account of social distancing requirements (Khoa et al., 2021). In other words, it is time to reconstruct the hospitality services marketing structure in a more viable form.

This transformation must go beyond lip service (Benjamin *et al.,* 2020); what is required is no less than the launch of a transformative marketing structure for hospitality organizations. Service design needs to be redefined, online platforms will likely become the

standard, and technology will be a critical channel for marketing. Thus, the pandemic crisis creates a discontinuity, after which some elements will return to their previous condition, even as others are transformed permanently. Hence, the new normal focuses attention on the transformative approach as a way for hospitality organizations to manage emergent and developing challenges.

Within the "edge of chaos where organizations are at their most innovative, flexible and adaptive" (McMillan and Carlisle, 2007, p. 584), hospitality firms are expected to have a higher capacity for transformation, which is vital for the survival of their operations. However, if organizations become too chaotic, it is inevitable that they disintegrate (Speakman, 2017). In this way, disintegrated (i.e. totally chaotic) organizations need to consider total transformation in a situation of chaos. This study has categorized disintegrated organizations as *non-operational*, *semi-operational*, and *diversified organizations*.

Non-operational organizations can be defined as hospitality firms that are forced to confront bankruptcy and insolvency, and completely bring their operations to an end due to the devastating impacts of the recent pandemic. For example, several hospitality organizations declared bankruptcy in the US in 2020 due to the COVID-19 pandemic (Scigliuzzo *et al.,* 2020).

Moreover, there are hospitality organizations that have not fully used their capacity due to the restrictions imposed as a result of the pandemic or they have been used for alternative purposes. These organizations can be labeled as *semi-operational organizations*. For example, there are hotel companies that have not used their rooms to accommodate guests during the pandemic. Instead, the premises were used as quarantine hotels; that is, "hotels that cater to guests self-isolating for 14 days when returning from overseas as mandated by governments" (Goh and Baum, 2021, p. 6) in order to help to prevent the spread of infection to the wider community (Teng *et al.,* 2020). Moreover, since the advent of the pandemic,

restaurants have only been allowed to offer takeaway services (Ioannides and Gyimothy, 2020), which has resulted in a change of focus from the table service operations to the online order and delivery in the restaurant sector.

The third most distinctive form of disintegration is *diversified hospitality organizations* that have stopped their operations in the hospitality industry and have diverted their activities to another sector. These hospitality organizations suffered from poor financial performance during the pandemic, so they moved away from their main operations, products, and services to compensate for their financial losses during the pandemic (Hoang *et al.,* 2021). For example, Hewing Hotel from North Loop, Minneapolis has started to use its rooms as private dining rooms by setting up tables in them and redecorating the rooms (Morse, 2021).

Bifurcation and cosmology: changing marketing channels of hospitality

Today, many hospitality organizations realize that the post-pandemic world is no longer rational and orderly, which is the main argument of cosmology. Indeed, COVID-19 cosmology now exists, since there is an ongoing investigation into growing public concerns that travel will never be the same again. Hence, today's COVID-19 world is a new normal (Kabadayi *et al.,* 2020; Alonso *et al.,* 2020) that will generate new and transformative avenues for producing, marketing, and delivering hospitality services. In this new normal, social distancing and health and safety measures will remain among the important nonpharmaceutical interventions to control the spread of COVID-19 (Gössling *et al.,* 2020; Hall *et al.,* 2020; Yang et al., 2021). This means that all types of interactions, including those between employees and customers, will be limited. Only after large numbers of people have been vaccinated will it be possible to ease social distancing restrictions and other nonpharmaceutical interventions, making it safe to resume tourism and hospitality services (Gössling *et al.,* 2020).

We can also observe evidence of a bifurcation of the hospitality industry as a result of the recent pandemic, in the form of a transformation of organizational management, changing roles of hospitality employees, developments in practitioners' understanding, and evolution of customer experience, all of which indicate the new direction, character, and structure of hospitality marketing channels.

First, *external marketing*, as can be seen from the proposed framework (see Figure 1), includes prices, products, places, and promotion facilities between organization and customers. In the new normal, external marketing needs to be redesigned according to the transformative perspective by moving toward a marketing plan that encourages safe and healthy services. The initial focus will be on supporting the mobility of local travelers, who are in a position to bounce back relatively quickly.

Second, *internal marketing* defines the management and satisfaction of the workforce in the work setting. In the post-pandemic world, hospitality practitioners need to work continually to determine how best to develop the rights and livelihoods of workers rather than using them as a tool for financial recovery. Internal marketing needs to consider enhancing the minimum salary to a truly "living wage" in order to preserve the workforce in a future crisis (Benjamin *et al.,* 2020).

Third, *interactive marketing* calls for close interaction between guests and employees to produce excellent service. The hospitality industry relies profoundly on human labor; therefore, the role of service encounters is quintessential, and these interactions are addressed as moments of truth (Kandampully *et al.,* 2015; Prentice *et al.,* 2021). However, in the new normal, practitioners will have to clarify the distinct factors that lead to satisfying experiences for customers. Under pandemic conditions, interactive marketing should favor consumption behavior that minimizes face-to-face contact, as a self-preventive attitude to risk and safety, involving technology-based and non-digitalized "untact" behaviors, utilized for health

protection purposes, including camping or hiking, and personalized special services, such as

room service or special family dining rooms (Bae and Chang, 2021).

Lastly, our transformative marketing structure proposes an additional marketing

channel, which we call *substitutional marketing*, because the service structure needs to be

transformable in accordance with new requirements by replacing any given services

marketing actor. For instance, to incorporate physical distancing, many service companies

have had to change the personalized or coproduction service concept that encourages

customers to participate more in service delivery design. Future crises may generate new

paradigms, leading to the emergence of new stakeholders and authorities, forcing service

organizations to substitute any stakeholder, and causing new forms, structures, procedures,

hierarchies, and knowledge to emerge. In the next global crisis, we need to be ready to react

swiftly and effectively, and this requires an adaptive and flexible approach. Therefore, we

propose substitutability as a characteristic of the new marketing channel in the post-pandemic

world. Thus, when service organizations have to transform their marketing structure in future

crises, any given stakeholder or actor may have to be replaced immediately in response to a

possibly chaotic or complex situation.

Self-organization and strange attractors: transformative marketing structure

The self-organization principle of chaos theory provides a theoretical base for establishing a

new understanding and a new transformative marketing structure in the complex and chaotic

post-pandemic world. Hospitality studies in relation to COVID-19 have addressed the need

for radical change in the industry, with clear implications for the travel experience, design and

delivery of tourist products, management of the booking and consumption experience, hosting

travelers, managing and governing destinations, and, most importantly achieving and

sustaining a transformative structure in the hospitality service (Alonso *et al.,* 2020; Bae and

Chang, 2021; Rivera *et al.,* 2021; Seyitoglu and Ivanov, 2020; Shin and Kang, 2020).

Therefore, this study proposes a transformative marketing structure framework for hospitality organizations for a better service design, and develops the conceptualization of a transformative hospitality services marketing structure in the new normal. Figure 1 sets out the conceptual framework proposing a transformative marketing structure in response to the complex and chaotic nature of the pandemic crisis.

New paradigms arising from the COVID-19 pandemic have emphasized the importance of the transformation of hospitality companies, employees, and customers as strange attractors who strive to bring order from chaos and thus create new conditions for structural transformation. Therefore, our framework proposes three phases for transformative action by hospitality organizations: (1) short-term transitions, (2) research and development (R&D), and (3) exploitation of technology through flexibility (Sarasvathy, 2009).

In terms of short-term transitions, capacity planning needs to be flexible. That is, hospitality companies need to be able to adapt their capacity in case a new crisis erupts in the future. Moreover, the marketing structure needs to be transformed from personalized service to remote service, in accordance with the untact lifestyle. That is, hospitality companies should develop digitalization and adapted technology to establish a transformative marketing structure that encourages a techno-intensive service design.

Our framework suggests that hospitality organizations will need to more adopt R&D in the new normal. In the post-pandemic period, it will not be possible to continue with the existing service structure, given the urgent need for transformative strategies, methods, and approaches. Accordingly, our framework puts R&D center stage. Transformative structure requires innovation, which is the first and fundamental component of R&D. Innovative companies will be able to survive in the new normal and to confront new challenges or global threats.

Innovation goes together with project management as a systematic way of putting new ideas into practice. Innovative ideas and strategies can be transformed into operational strategies and practices through project management, which in turn can pave the way for transformative marketing structure. During chaotic circumstances, prevention is another vital transformative characteristic in the marketing structure, allowing new target markets to be explored. Developing a recovery strategy to compensate for reduced customer flow and demand will be among the most significant tasks of a service organization in the post-pandemic world. The transformative framework includes the concept of pervasiveness to compensate for reduced customer demand when a new crisis inevitably appears. To handle the chaos arising from any such crisis, our transformative marketing structure also anticipates flexibility as vital for the survival of organizations in relation to the substitutional marketing channel during times of crisis. None of these transformative actions can be completed without effective leadership in hospitality organizations. We therefore propose what we call transformational leadership for managing organizations effectively and transforming the services marketing structure for future events. In other words, the transformative marketing structure requires transformational leadership.

Second, by means of transformative learning theory, the transformative procedure of hospitality employees and customers can be clarified. For employees, the transformative marketing structure consists of four stages: (1) a disorienting dilemma, (2) the search for alternatives, (3) obtaining new skills and knowledge, and (4) performing transformed roles. The pandemic is considered as a disorienting dilemma, which means that it triggers employees to adapt with technology and digitalization. That is, in the new normal, the need for employees with perfect social skills, interrelationship capabilities, and fluency in several foreign languages will probably decrease, because new-generation technologies can achieve these tasks more effectively and efficiently. For example, a Japanese smart face mask

translates eight languages; thus, employees do not have to be fluent in several foreign

languages, but they do need to keep up with new developments in technology and

digitalization (CNN Business, 2020). A transformative perspective is therefore needed to

develop employee skills and knowledge in the new normal, and organizations will need to

support their employees with appropriate training and development. Thus, our transformative

perspective proposes that interrelationship skills will be replaced by technological skills, and

training facilities need to be reconsidered on this basis.

Our framework also proposes that employee transformation is life-long and involves

continuous searching for alternative roles and positions according to the requirements of the

new normal. For example, the pandemic requires people to maintain social distancing, and

therefore employees need to offer services in a way that respects customers' health and safety.

This may force employees to use technology in service settings more effectively. Hence,

employees need to adopt the roles that will allow them to develop immediate transformative

responses to crises in the post-pandemic world. In our framework, hospitality employees will

not only perform their transformed roles and tasks but will always be ready for a new

transformation when required.

The proposed transformative marketing structure anticipates that another substantial

effect of the recent pandemic will be on customers' perspective and worldview. The pandemic

can be regarded as a disorienting dilemma, defined by transformative learning theory as an

individual's experience with an unfamiliar condition or a shock. The dilemma triggers the

acquisition of new knowledge and understanding regarding different situations and lifestyles

(Soulard *et al.,* 2019). Drawing on this conceptualization, we propose three steps for

explaining customers' transformative experiences: (1) global awareness, (2) novel

perspectives, and (3) revised roles and interpersonal relationships.

The pandemic has restricted our relationships, and individuals have reconstructed their social lives accordingly. From the hospitality perspective, whereas people used to participate in mass travel and expected more personalized service from service providers, now they place greater emphasis on health and safety. For customers, health and safety are the new non-negotiable determinants in the service structure. From the services marketing perspective, the transformation of customer demand will continue as long as technological development proceeds. This leads to novel perspectives in line with the requirements of the new normal. Our framework proposes that customers will have new viewpoints for dealing with the detrimental effects of complexity and chaos. For instance, due to the recent pandemic, customers now place greater emphasis on nonpharmaceutical measures as a way of coping with fears, worries, and anxiety. This is reflected in revised roles and interpersonal relationships in our framework. As argued by transformative learning theory, disruption or a global event like the pandemic can lead to transformation in people's roles and in their associations with others.

Furthermore, our framework anticipates the dilemma that although people will prioritize their own health and safety, they will nevertheless monitor others' health and safety closely because of the risk of contamination. To minimize this risk, tourists will be looking for untact services (Bae and Chang, 2021), and this will stimulate low-touch and high-tech service solutions in the post-pandemic world. Customers' decision-making processes, including searching, evaluating alternatives, and buying a service/product, are likely to be transformed, since many people's priorities have changed in the wake of the pandemic. For example, for many customers today, quality equals health. Hence, our framework proposes that customers' roles, relations, and quality perception are not stable but dynamic and transformative.

The next section proposes a number of transformative actions, including precise and peculiar examples of transformative marketing structure in hospitality organizations in the new normal.

Transformative implications of the framework

This section provides examples of what the transformative marketing structure offers to hospitality organizations in the post-pandemic world, including specific recommendations for each type of actor in the structure (companies, employees, and customers).

Implications for companies

Based on the three-stage transformation of hospitality organizations proposed in our framework, the following implications are offered as specific examples of the transformative marketing structure in the new normal.

Short-term transitions. One of the main objectives of hospitality organizations was to sell their goods and services as much as possible to increase their financial performance and gain a competitive advantage over their rivals in the market. It was commonly suggested that to obtain financial success, hotels needed to use their full capacity and interpersonal service delivery, which required a high level of interaction between guests and employees (Ariffin and Maghzi, 2012; Heskett *et al.,* 1994; Lin and Wong, 2020). In the new normal, however, hotel organizations have been forced to transform their policies and practices, because nonpharmaceutical measures, such as physical social distancing, make it impossible to maintain the previous service design. In the short term, they need to start by reconsidering capacity planning, limiting the number of guests to ensure social distancing. In the new normal, hospitality businesses should develop a service delivery design that both satisfies the guests' expectations and fits the organization's resources and capabilities (Seyitoglu and

Ivanov, 2020). They need to concentrate on the health and safety of customers and workers

and on physical distancing.

Hospitality organizations can also adopt untact services to limit face-to-face

interaction (Bae and Chang, 2021). In the short term, this could include the use of contactless

check-in and check-out, keyless room access, and digital menus to generate a trouble-free

travel experience for customers. Another way for organizations to create a "COVID-19-free"

marketing structure for customers is to vaccinate managers/supervisors and employees at all

levels, and to improve the firm's health infrastructure (Gursoy et al., 2021).

Research and development. Hospitality companies' R&D strategy should include three

components: innovation, project management, and prevention. Innovation can prompt fresh

opinions, decisions, outcomes, and creativity, which can lead to novel products and services.

It can also trigger the improvement of firm-level capabilities through a process of trial and

error (Palmié *et al.,* 2019) that reflects the effectuation component. Through innovation, hotel

organizations can better integrate new-generation technologies, such as artificial intelligence

and service robots, into their service delivery design.

Project management, the second component of R&D, can be defined in terms of the

procedures, approaches, abilities, knowledge, and experience that facilitate the

accomplishment of the organization's specific purposes. Project management can help

hospitality companies to control or avoid failures, which mitigates the risks of trying new

policies and approaches. For example, a project to ensure a service delivery design based on

physical social distancing could generate a unique selling proposition and improve the

organization's image, thereby attracting the attention of potential guests.

Prevention, the last component of R&D, also has an association with effectuation, in

that a hospitality organization looking for new market opportunities, which could be

completely different from the existing demand and operations, can retain competitiveness by

discovering novel target markets. R&D stimulates hospitality companies to investigate and test activities that may or may not be implemented. This process of trial and error can help companies to develop preventive approaches for dealing with future crises. For example, given the current international travel restrictions, hotel companies can focus on the domestic market to make up for their losses.

Exploiting technological facilities. In line with nonpharmaceutical measures, new-generation technologies (including AI, service robots, and smart devices) may be a useful tool for maintaining physical distance. In the post-COVID-19 period, the use of new-generation technologies is likely to become widespread, as customers will be more concerned than previously about their safety and security when buying goods and services from hospitality organizations (Zeng *et al.,* 2020). In this sense, new-generation technologies may dramatically affect the future of hospitality service design (Belk, 2020). Therefore, hospitality firms should adopt a flexible approach in keeping up with recent developments in technology and applying these innovations in their service design.

In the new normal, long-term forecasting is unlikely to be accurate, and substantial change may occur when it is not expected; hence, adaptiveness and flexibility are vital for the survival of organizations (Levy, 1994). By being flexible, hospitality companies can keep up with developments in virtual reality devices, service robots, smart systems, and intelligent automation, and those technologies can inaugurate a new era in service by replacing human labor in the service encounter (substitution of service workers; Larivière *et al.,* 2017). Using new technology could give a hospitality firm a competitive advantage over its rivals, since artificial intelligence systems can provide better service than human employees. In addition, adopting new-generation technologies can make it easier for hotel practitioners to deliver items to rooms, to advertise, promote, and market the hotel brand and destination, and to process payments (Ivanov *et al.,* 2018). Applying new technology and smart devices can

therefore provide services that run autonomously without labor intervention, which may be

critical for the survival of organizations during periods of crisis. The adoption of new

technology can significantly enhance service quality, eliminating possible failures due to

human error (Bock *et al.,* 2020; Lien et al., 2021). Thus, we propose that the pandemic will be

a trigger for technological transformation in the service delivery systems of hospitality

organizations, since customers will be deeply concerned about their health and safety in the

post-pandemic era (Jiang and Wen, 2020).

We further propose that the aforementioned transformations cannot be accomplished

without transformational leadership, since a reconsideration of organizational policy and

service design will necessitate a transformative approach. According to Bass and Riggio

(2006), transformational leaders are more likely to view objectives as more important than

avoiding the violation of rules and precedents. Moreover, these leaders are more likely to

change the rules and even the culture as needed over time. Hospitality businesses encouraging

this style of leadership will successfully transform their organizational policy and service

design. Without transformational leadership, the existing structure will persist, albeit with

small-scale revisions and precautions to ensure hygienic conditions, and this may be sufficient

in smaller-scale crises or epidemics. However, when the next global pandemic takes place –

as many scholars have argued that it will – the existing structure will not work, and

organizations will again be forced to seek solutions on an emergency basis (Alonso *et al.,*

2020; Benjamin *et al.,* 2020; Kabadayi *et al.,* 2020). This opportunity for technological

transformation should not be missed. When the next global crisis takes place, transformed

hospitality companies in which the employee-based service delivery system has been replaced

by a technology-based approach will be in the strongest position.

Implications for employees

As explained above, we propose a four-stage process of employee transformation: (1) experiencing a disorienting dilemma, (2) searching for alternative roles and positions, (3) obtaining skills and knowledge for transformation, and (4) performing transformed roles.

   Disorienting dilemma. The recent pandemic has been considered as a milestone in the development of the hospitality marketing structure, because it has radically altered customer behaviors and expectations (Baum *et al.,* 2020). The desirable characteristics of hospitality service have transformed from "personalization" or "warm welcome" (Ariffin and Maghzi, 2012; Bayighomog and Araslı, 2019; Chandni and Rahman, 2020) to "socially distanced." As part of this transformation, employees have been led to reconsider their roles and positions in the new normal.

   Searching for alternative roles and positions. Hospitality companies have to redesign their service delivery to provide a high level of physically distanced service in the post-pandemic era. This change requires reconsideration of employees and their roles, and hospitality employees should pay close attention to the priorities of companies and customers. Companies must mitigate guests' anxiety by keeping them safe. Employees should therefore seek alternatives ways of providing healthy and safe service to customers (Hofmann *et al.,* 2021). For example, vaccination of hospitality employees and hiring employees who have vaccine passports can mitigate customers' anxiety. Employees should understand that their new roles are completely different than their previous ones, because ensuring safety and health is now more important than providing warm, personalized service.

   Obtaining skills and knowledge for transformation. Hospitality employees should adapt to the new conditions by improving their knowledge of health and safety precautions. In other words, they should learn and abide by the health and safety rules, and they need to be trained in these matters to improve their ability to do this. In addition, they should be aware of

the importance of new-generation technologies, which entails being equipped with the skills

and knowledge necessary to quickly and effectively adopt new technology, including service

robots, artificial intelligence, and smart devices.

Performing transformed roles. Hospitality employees must also adjust to their new

roles and positions. This may involve effective use of smart devices in service delivery, or

collaboration with service robots in offering service to customers who are looking for social

relations and interaction or who expect human service. The new roles require strict employee

compliance with health precautions during customer service, including being vaccinated.

Adopting and successfully performing transformed roles and positions can ensure excellent

service in a hospitality setting, resulting in customer satisfaction and loyalty, which

contributes to the profitability and growth of hospitality companies, supporting their survival

during difficult trading times.

Implications for customers

Our framework proposes three steps for customers' transformative actions: (1) global

awareness, (2) novel perspectives, and (3) revised roles and interpersonal relationships.

Global awareness. In the wake of the COVID-19 outbreak, people have encountered

the reality of global crises and their devastating impacts on mankind, in many cases for the

first time. People have closely followed recent developments on the global scale, which has

given them a broader sense of the world. This can be considered an opportunity for people to

increase their awareness and understanding, improving their global perspective and equipping

them with new knowledge. Individuals' transformative learning experience of being exposed

to the pandemic will shape their travel behaviors, attitudes, and intentions, as well as their

decision-making processes. Thus, the pandemic has fortified customers' global awareness in

the new era. For example, customers may in future prefer boutique hotels in more isolated

areas to large chain hotels in popular resorts, in accordance not only with their own health and

safety but with that of other guests and service providers.

Novel perspectives. People who improve their global awareness and citizenship have a

novel viewpoint on travel and tourism, which brings a clearer understanding of the

detrimental impacts of global crises and may change behaviors and attitudes. COVID-19 has

changed travelers' viewpoints by generating a wave of stress and worry unfamiliar to many in

recent years (Zwanka and Buff, 2021). Travelers have reconsidered their perspectives and

habits, with a renewed focus on physiological and psychological welfare (Jiang and Wen,

2020). In the new normal, cleanliness and sanitation will be even more important to travelers

(Gössling *et al.,* 2020), who will prioritize the adoption of nonpharmaceutical measures in

their lives. Therefore, hospitality guests are likely to take a keen interest in cleaning and

hygiene measures and vaccine procedures when making a travel decision (Park *et al.,* 2019).

For example, Greece is planning to vaccinate the entire population of its islands to create a

"COVID-19 free" tourist environment for international travelers. However, this will require

travelers to show their "vaccine passports" before entry. Israel is one of the few countries

where the population has been extensively vaccinated; because it addresses the health and

safety concerns of international travelers, this is a source of competitiveness in the industry

(Gössling *et al.,* 2020; Memish *et al.,* 2021).

Revised roles and interpersonal relationships. The pandemic has also affected roles

and interpersonal relations. Customers used to play an active role in the co-creation process

and have close interactions with service employees (Chathoth *et al.,* 2013). However, in the

new normal, it is vital for hospitality organizations to focus on developing a safe service

delivery design and to address guests' anxiety. Travelers may expect more digitalization in

the service design to reduce perceived health risks by limiting social interactions. Zeng et al.

(2020) suggested that adoption of new technology could transform the conventional high-

touch, low-tech customer experience into a low-touch, high-tech experience, thus reducing interaction between guests and service providers (Shin *et al.,* 2019). Overall, the transformative marketing structure proposes that in response to the pandemic, the untact lifestyle may gain in popularity among customers, with a substantial effect on their pre- and post-buying behaviors and attitudes. These changing roles and interpersonal relations can be fulfilled by designing and providing safe and comfortable experiences characterized by a technology-based service structure, thereby promoting the future survival and development of hospitality organizations.

Conclusions

The aim of this study is to assess the extent to which a chaos theory-based approach can provide a transformative framework for hospitality organizations' reactions to crises. Drawing on research into the progress of and reactions to the effects on the hospitality industry of the COVID-19 pandemic, it clarifies the extent to which an alternative approach, adopting the principles of chaos theory, is reflected in and can improve the reaction of the hospitality industry to the crisis.

Three main conclusions can be drawn. First, the massive negative impacts of the pandemic are clear, and they call into question the potential effectiveness of existing service marketing models. Drawing on the concept of the edge of chaos, one of the underlying principles of chaos theory, we can characterize the new normal as a situation in which the COVID-19 pandemic will trigger a series of further events that bring the hospitality industry to the edge of chaos. Second, we suggest that the unfolding and outcomes of the pandemic show that the principles of chaos theory, namely bifurcation and cosmology, can be useful in reconstructing services marketing channels. The proposed transformative chaos theory-based structure identifies appropriate changes of direction, characteristics, and new structures of

hospitality marketing channels in the new normal. Four marketing channels are identified: external, internal, interactive, and substitutional.

Furthermore, drawing on self-organization, another underlying tenet of chaos theory, we propose a transformative services marketing structure for hospitality organizations as a response to the complex and chaotic nature of the COVID-19 pandemic. The transformative structure involves three main actors (organizations, employees, and customers) and acknowledges their growing importance as strange attractors in the hospitality industry. Analyzing the transformed roles and positions of companies, human labor, and customers in the proposed framework and discussing a unique pathway for each actor are crucial factors in the (re)conceptualization of the hospitality services marketing structure, because investigation of transformative marketing structure and hospitality actors' changing roles using the underlying principles of chaos theory remains scarce. Hence, this study provides a meaningful contribution to our understanding of services marketing in hospitality.

Morrison's (2010) services marketing triangle, commonly used in tourism and hospitality studies to shape the service flow procedure, is the fundamental services marketing model. However, the current pandemic has required hospitality practitioners and academicians to transform the overwhelming majority of existing models, concepts, and theories; in other words, the pandemic can be considered as a milestone on the road to the renewal of existing knowledge and understanding. Underpinning the transformation process with chaos theory and the effectuation and transformative learning approaches provides a deeper understanding of how the hospitality industry will change as a result of COVID-19. These theories shed light on the importance of chaos (local or global) and shocks for the transformation of firms and the changing roles, behaviors, attitudes, and beliefs of individuals (Kitchenham, 2008; Mezirow, 1997; Sarasvathy, 2009; Speakman and Sharpley, 2012).

The contribution of this paper lies in the conceptual pathways it suggests for transforming hospitality firms, employees, and customers and for demonstrating their transformed roles and positions in the new normal (as illustrated in Figure 1). First, using the effectuation approach, our study proposes three phases for justifying the transformation of hospitality companies. Hospitality firms should concentrate on short-term transitions to adjust their existing forms immediately, and then R&D should be prioritized to ensure the affordability of any losses and to anticipate the future. The companies also need to exploit technological facilities by increasing their flexibility. Second, using the conceptual guidelines of transformative learning theory, we develop a four-step transformation process for hospitality employees starting from the experience of the pandemic as a disorienting dilemma. To adapt effectively, hospitality employees should search for a number of alternative roles and positions, acquiring the new skills and knowledge necessary for transformation. This will enable them to perform their transformed roles effectively in the new normal. Our conceptual framework also includes three stages of customers' transformative experiences: global awareness, novel perspectives, and revised roles and interpersonal relationships. We posit that individual travelers have become more aware of global challenges and issues and that they possess new perspectives on tourism and hospitality. From their new viewpoints, they are likely to develop different roles and relationships with other actors, including locals, hospitality companies, and employees.

We also predict the integration of new-generation technologies, which is highly likely to prompt changes in behaviors, attitudes, and world beliefs within the new service structure. If the transformed roles and tasks can be strengthened by adopting digitalization, short-term or daily behavioral changes and habits in the new services marketing process may become permanent transformations; this will include shifting perceptions of smart devices and robots, adoption of technology-oriented lifestyles, use of technological tools in interpersonal

relations, and feeling drawn to technological development. Finally, this study proposes a new marketing channel, substitutional marketing, that will allow hospitality organizations to respond more effectively to the inevitable crises in the new normal.

Our study is one of the first to propose and discuss a transformative marketing structure within the hospitality context. To date, transformational changes in attitudes and behaviors during travel have been studied by focusing on tourist experiences (Pung *et al.,* 2020; Robledo and Batle, 2017) and, to a limited extent, on tourism practitioners (Soulard *et al.,* 2019); a transformative marketing structure that includes organizations, employees, and customers in hospitality has not been examined. Our proposed conceptual map thus has the potential to improve knowledge and understanding of how the COVID-19 pandemic can result in long-lasting transformations of attitudes and behaviors.

Furthermore, the current paper offers hospitality practitioners a new option for treating the coronavirus pandemic as an opportunity to effect a permanent transformation in their services marketing structure. The proposed framework recommends that hospitality practitioners should ensure their transformation when planning their strategy for providing services. Hospitality companies are encouraged to adopt R&D and innovation, including new-generation technologies, and to increase awareness of the importance of transformation by putting technical infrastructure in place and procuring the necessary equipment and smart devices (such as robotics and AI). They are also encouraged to minimize interactions between frontline employees and customers, which should definitely be avoided after the pandemic, and to enhance customers' experiences of technological innovations by offering virtual or smart service implementations. Furthermore, hoteliers need to focus on generating new market opportunities to make up for their losses in the new period. For example, they can respond to international travel restrictions by developing new marketing and promotion activities to attract domestic travelers.

A significant challenge for hospitality practitioners is that the transformation of management practices and marketing activities makes it necessary to keep up with the latest technological developments to provide better service in the new normal and to ensure customers' health and safety. To trigger and reinforce such a permanent change in hospitality companies, destination marketers and governments may have to provide political and/or financial support and incentives. On the one hand, hospitality practitioners should provide training for their employees to improve their balance in terms of technological innovation and to enhance their skills and capabilities in utilizing smart devices; this must include the ability to resolve any issues that arise from the use of these new-generation technologies. Practitioners should also help customers to intensify their transformative learning about the use of new-generation technologies, inspiring them to choose hospitality companies that provide technology-centered services. Permanent changes in customer behaviors and attitudes due to technological innovation in the services marketing structure can also lead to positive electronic word of mouth, which will trigger other customers to choose hospitality companies that provide similar services. Through this process, the hospitality industry can bounce back in the post-pandemic world.

This study has a number of theoretical limitations. Despite our efforts to review all the literature on relevant topics, our interpretations and reconceptualization of existing service structures lead to subjective outputs that may limit the study's generalizability. Nevertheless, besides empirical investigations, the current study offers a deep discussion of interdisciplinary concepts and theories of the pandemic crisis, services marketing, chaos, effectuation, and transformative learning so as to produce a transformational effect of the COVID-19 pandemic on hospitality marketing structure. Future studies can build on this knowledge by focusing on specific implications of the proposed transformative structure in the tourism industry in general or in its subsectors (i.e., transportation, restaurants, and airlines). Future investigations

could also develop a specific framework for the integration of the tourism and hospitality

workforce into the new normal to minimize the risks of transforming the service structure, to

generalize existing knowledge of the transformation procedure, and to contribute to the

continuing conceptualization of the services marketing structure in the post-pandemic world.

Finally, although chaos theory has the potential to explain the pandemic and its massive

negative effect on the sustained performance of tourism destinations and organizations, it may

also provide several methods of understanding and coping with the implications of the

COVID-19 pandemic for destination governance and competitiveness. We therefore

recommend further investigation in this area.

References

Ali, F., Dogan, S., Amin, M., Hussain, K. and Ryu, K. (2021), "Brand anthropomorphism,

love and defense: does attitude towards social distancing matter?", *The Service Industries

Journal*, Vol. 41 No. 1-2, pp. 58-83.

Alonso, A. D., Kok, S. K., Bressan, A., O'Shea, M., Sakellarios, N., Koresis, A., ... and

Santoni, L. J. (2020), "COVID-19, aftermath, impacts, and hospitality firms: an international

perspective", *International Journal of Hospitality Management*, Vol. 91, pp. 1-11.

Arend, R. J., Sarooghi, H., and Burkemper, A. (2015), "Effectuation as ineffectual? Applying

the 3E theory-assessment framework to a proposed new theory of entrepreneurship",

Academy of Management Review, Vol. 40 No. 4, pp.630-651.

Ariffin, A. A. M. and Maghzi, A. (2012), "A preliminary study on customer expectations of

hotel hospitality: influences of personal and hotel factors", *International Journal of

Hospitality Management*, Vol. 31 No. 1, pp.191-198.

Backer, E. (2007), "VFR travel: an examination of the expenditures of VFR travellers and

their hosts", *Current Issues in Tourism*, Vol. 10 No. 4, pp.366-377.

Bae, S. Y. and Chang, P. J. (2021), "The effect of coronavirus disease-19 (COVID-19) risk

perception on behavioural intention towards 'untact' tourism in South Korea during the first

wave of the pandemic (March 2020)", *Current Issues in Tourism*, Vol. 24 No. 7, pp. 1017-

1035.

Baker, M. A. and Magnini, V. P. (2016), "The evolution of services marketing, hospitality

marketing and building the constituency model for hospitality marketing", *International

Journal of Contemporary Hospitality Management*, Vol. 28 No. 8, pp.1510-1534.

Bass, B. M. and Riggio, R. E. (2006), *Transformational leadership (2nd Ed.),* Lawrence

Erlbaum Associates, London.

Baum, T., Mooney, S. K., Robinson, R. N. and Solnet, D. (2020), "COVID-19's impact on

the hospitality workforce–new crisis or amplification of the norm?", *International Journal of

Contemporary Hospitality Management,* Vol. 32 No. 9, pp.2813-2829.

Bayighomog, S. W. and Araslı, H. (2019), "Workplace spirituality–customer engagement

Nexus: the mediated role of spiritual leadership on customer–oriented boundary–spanning

behaviors", *The Service Industries Journal*, Vol. 39 No. 7-8, pp.637-661.

Belk, R. (2020), "Ethical issues in service robotics and artificial intelligence", *The Service

Industries Journal*, Doi: https://doi.org/10.1080/02642069.2020.1727892.

Benjamin, S., Dillette, A., and Alderman, D. H. (2020), "'We can't return to normal':

committing to tourism equity in the post-pandemic age", *Tourism Geographies*, Vol. 22 No.

3, pp.476-483.

Berry, L. L. (1980), "Services marketing is different," *Business,* Vol. 30 No. 2, pp.24-29.

Bimonte, S. and Punzo, L. F. (2016), "Tourist development and host–guest interaction: an

economic exchange theory", *Annals of Tourism Research*, Vol. 58, pp.128-139.

Bock, D.E., Wolter, J.S. and Ferrell, O.C. (2020), "Artificial intelligence: disrupting what we

know about services", *Journal of Services Marketing*, Vol. 34 No. 3, pp.317-334.

Chandni, S. and Rahman, Z. (2020), "Customer engagement and employee engagement: systematic review and future directions", *The Service Industries Journal*, Vol. 40 No. 13-14, pp.932-959.

Chaouali, W., Souiden, N., and Ringle, C. M. (2020), "Elderly customers' reactions to service failures: the role of future time perspective, wisdom and emotional intelligence", *Journal of Services Marketing*, Vol. 35 No. 1, pp. 65-77.

Chathoth, P., Altinay, L., Harrington, R. J., Okumus, F., and Chan, E. S. (2013), "Co-production versus co-creation: a process based continuum in the hotel service context", *International Journal of Hospitality Management*, Vol. 32 No. 1, pp.11-20.

CNN Business (2020), "A Japanese robotics startup has invented a smart mask that translates into eight languages", 13 November, available at:

https://edition.cnn.com/2020/08/03/business/japanese-robotics-smart-face-mask-spc-intl/index.html#:~:text=The%20smart%20mask%20translates%20between,specializes%20in%20the%20Japanese%20language (accessed 10 April 2021)

Coghlan, A. and Weiler, B. (2018), "Examining transformative processes in volunteer tourism", *Current Issues in Tourism*, Vol. 21 No. 5, pp.567-582.

Doherty, N. and Delener, N. (2001), "Chaos theory: marketing & management implications", *Journal of Marketing Theory and Practice*, Vol. 9 No. 4, pp.66-75.

Edvardsson, B. and Enquist, B. (2002), "'The IKEA saga': How service culture drives service strategy", *The Service Industries Journal*, Vol. 22 No. 4, pp.153-186.

European Parliament. (2020), "Covid-19 and the tourism sector", available at:

https://www.europarl.europa.eu/RegData/etudes/ATAG/2020/649368/EPRS_ATA (2020)649368_EN.pdf (accessed 20 March 2021)

Farazmand, A. (2003), "Chaos and transformation theories: a theoretical analysis with implications for organization theory and public management", *Public Organization Review*, Vol. 3 No. 4, pp.339-372.

Finsterwalder, J. (2021), "Social distancing and wellbeing: conceptualizing actor distance and actor safe zone for pandemics", *The Service Industries Journal*, Vol. 41 No. 1-2, pp. 9-31.

Fisk, R. P., Brown, S. W., and Bitner, M. J. (1993), "Tracking the evolution of the services marketing literature", *Journal of Retailing*, Vol. 69 No. 1, pp.61-103.

Furrer, O., Kerguignas, J. Y., Delcourt, C., and Gremler, D. D. (2020), "Twenty-seven years of service research: a literature review and research agenda", *Journal of Services Marketing,* Vol. 34 No. 3, pp.299-316.

Goh, E. and Baum, T. (2021), "Job perceptions of Generation Z hotel employees towards working in Covid-19 quarantine hotels: the role of meaningful work", *International Journal of Contemporary Hospitality Management*, Vol. ahead-of-print No. ahead-of-print. https://doi.org/10.1108/IJCHM-11-2020-1295

Gössling, S., Scott, D. and Hall, C. M. (2020), "Pandemics, tourism and global change: a rapid assessment of COVID-19", *Journal of Sustainable Tourism*, Vol. 29 No. 1, pp.1-20.

Gurlek, M. and Koseoglu, M.A. (2021), "Green innovation research in the field of hospitality and tourism: the construct, antecedents, consequences, and future outlook", *The Service Industries Journal*, Vol. ahead-of-print No. ahead-of-print.

doi: 10.1080/02642069.2021.1929930

Gursoy, D., Can, A.S, Williams, N. and Ekinci, Y. (2021), "Evolving impacts of COVID-19 vaccination intentions on travel intentions", *The Service Industries Journal*, Vol. ahead-of-print No. ahead-of-print, doi: 10.1080/02642069.2021.1938555

Hall, C. M., Scott, D., and Gössling, S. (2020), "Pandemics, transformations and tourism: be careful what you wish for", *Tourism Geographies*, Vol. 22 No. 3, pp.577-598.

Hao, F., Xiao, Q., and Chon, K. (2021), "COVID-19 and China's hotel industry: Impacts, a disaster management framework, and post-pandemic agenda", *International Journal of Hospitality Management*, Vol. 5, pp. 1-12.

Heskett, J. L., Jones, T. O., Loveman, G. W., Sasser, W. E., and Schlesinger, L. A. (1994), "Putting the service-profit chain to work", *Harvard Business Review*, Vol. 72 No. 2, pp.164-174.

Hoang, T. G., Truong, N. T., and Nguyen, T. M. (2021), "The survival of hotels during the COVID-19 pandemic: a critical case study in Vietnam", *Service Business*, Vol. 15 No. 2, pp. 209-229.

Hofmann, V., Stokburger-Sauer, N. E., Wanisch, A. and Hebborn, H. (2021), "Masked smiles matter–employee verbal expertise and emotion display during COVID-19", *The Service Industries Journal*, Vol. 41 No. 1-2, pp. 107-137.

Hsieh, C. M. (2018), "A multilevel analysis of the service marketing triangle in theme parks", *Journal of Travel & Tourism Marketing*, Vol. 35 No. 2, pp.130-147.

Huang, A. and Farboudi Jahromi, M. (2021), "Resilience building in service firms during and post COVID-19: COVID-19", *The Service Industries Journal*, Vol. 41 No. 1-2, pp. 138-167.

Ioannides, D. and Gyimothy, S. (2020), "The COVID-19 crisis as an opportunity for escaping the unsustainable global tourism path", *Tourism Geographies*, Vol. 22 No. 3, pp. 624-632.

Ivanov, S., Webster, C., and Garenko, A. (2018), "Young Russian adults' attitudes toward the potential use of robots in hotels", *Technology in Society*, Vol. 55, pp.24-32.

Japutra, A. and Situmorang, R. (2021), "The repercussions and challenges of COVID-19 in the hotel industry: Potential strategies from a case study of Indonesia", *International Journal of Hospitality Management*, Vol. 95, pp. 1-12.

Jiang, Y. and Wen, J. (2020), "Effects of COVID-19 on hotel marketing and management: a perspective article", *International Journal of Contemporary Hospitality Management*, Vol. 32 No. 8, pp. 2563-2573

Kabadayi, S., O'Connor, G. E., and Tuzovic, S. (2020), "The impact of coronavirus on service ecosystems as service mega-disruptions", *Journal of Services Marketing,* Vol. 34 No. 6, pp. 809-817.

Kandampully, J., Zhang, T. C., and Bilgihan, A. (2015), "Customer loyalty: a review and future directions with a special focus on the hospitality industry", *International Journal of Contemporary Hospitality Management*, Vol. 27 No. 3, pp. 379-414.

Kirillova, K., Lehto, X., and Cai, L. (2017), "Tourism and existential transformation: an empirical investigation", *Journal of Travel Research*, Vol. 56 No. 5, pp. 638-650.

Kirk, D. and Pine, R. (1998), "Research in hospitality systems and technology", *International Journal of Hospitality Management*, Vol. 17 No. 2, pp. 203-217.

Kitchenham, A. (2008), "The evolution of John Mezirow's transformative learning theory", *Journal of Transformative Education*, Vol. 6 No. 2, pp.104-123.

Larivière, B., Bowen, D., Andreassen, T. W., Kunz, W., Sirianni, N. J., Voss, C., ... and De Keyser, A. (2017), "Service Encounter 2.0": an investigation into the roles of technology, employees and customers", *Journal of Business Research*, Vol. 79, pp.238-246.

Kuo, H-I., Chen, C-C., Tseng, W-C., Ju, L-F., and Huang, B-W. (2008), "Assessing impacts of SARS and Avian Flu on international tourism demand to Asia", *Tourism Management*, Vol. 29 No. 5, pp. 917-928.

Levy, D. (1994), "Chaos theory and strategy: theory, application, and managerial implications", *Strategic Management Journal*, Vol. 15 No. 2, pp.167-178.

Lien, C-H, Hsu, M. K., Shang, J-Z, and Wang, S.W. (2021), Self-service technology adoption by air passengers: a case study of fast air travel services in Taiwan", *The Service Industries Journal*, Vol. 41 No.9-10, pp. 671-695

Lin, Z. and Wong, I. A. (2020), "Cocreation of the hospitality brand experience: a triadic interaction model", *Journal of Vacation Marketing*, Vol. 26 No. 4, pp.412-426.

Longwoods International. (2020), "COVID-19 travel sentiment study-wave 5", available at: https://longwoods-intl.com/news-press-release/covid-19-travel-sentiment-study-wave-5 (accessed 20 March 2021)

Lorenz, E. N. (1963), "Deterministic nonperiodic flow", *Journal of Atmospheric Sciences*, Vol. 20 No. 2, pp.130-141.

Lovelock, C. H. (1979), "Theoretical contributions from services and non-business marketing," in O.C. Ferrell, Stephen W.B., and Charles W.L., Jr., (eds.), *Conceptual and theoretical developments in marketing,* American Marketing Association, Chicago, IL, pp.147-165.

Lovelock, C. H. (1983), "Classifying services to gain strategic marketing insights", *Journal of Marketing*, Vol.47 No.3, pp.9-20.

Lovelock, C.H. and Wirtz, J. (2011), *Services marketing: people, technology, strategy* (7th ed.), Prentice Hall, Boston, MA.

Lu, L., Cai, R., and Gursoy, D. (2019), "Developing and validating a service robot integration willingness scale", *International Journal of Hospitality Management*, Vol. 80, pp.36-51.

MacInnis, D. J. (2011), "A framework for conceptual contributions in marketing", *Journal of Marketing*, Vol. 75 No. 4, pp.136-154.

MacInnis, D. J., Morwitz, V. G., Botti, S., Hoffman, D. L., Kozinets, R. V., Lehmann, D. R., ... and Pechmann, C. (2020), "Creating boundary-breaking, marketing-relevant consumer research", *Journal of Marketing*, Vol. 84 No. 2, pp.1-23.

Matalamäki, M. J. (2017), "Effectuation, an emerging theory of entrepreneurship – toward a mature stage of the development", *Journal of Small Business and Enterprise Development,* Vol. 24, No. 4, pp.928-949.

McKercher, B. (1999), "A chaos approach to tourism", *Tourism Management*, Vol. 20 No. 4, pp. 425-434.

McMillan, E. and Carlisle, Y. (2007), "Strategy as order emerging from chaos: A public sector experience. *Long Range Planning*, Vol. 40 No. 6, pp. 574-593.

Memish, Z. A., Alharthy, A., Alqahtani, S. A. and Karakitsos, D. (2021), "COVID-19 air travel restrictions and vaccine passports: An ongoing debate", *Travel Medicine and Infectious Disease,* Vol. 42, pp. 1-3.

Mezirow, J. (1991), *Transformative dimensions in adult learning,* Jossey-Bass, San Francisco, CA.

Mezirow, J. (1997), "Transformative learning: theory to practice", *New Directions for Adult and Continuing Education*, Vol. 74 No. 1, pp.5-12.

Morrison, A. M. (2010), *Hospitality & travel marketing (4th ed.),* Delmar Cengage Learning, Clifton Park, NY.

Morse, J. (2021), "How hotels are diversifying their offerings to generate revenue during Covid", *Hospitality Technology,* available at: https://hospitalitytech.com/how-hotels-are-diversifying-their-offerings-generate-revenue-during-covid. (Accessed 19/06/2021)

Mthanti, T. S. and Urban, B. (2014), "Effectuation and entrepreneurial orientation in high-technology firms", *Technology Analysis & Strategic Management*, Vol. 26 No. 2, pp.121-133.

Page, S., Yeoman, I., Munro, C., Connell, J., and Walker, L. (2006), "A case study of best practice – Visit Scotland's prepared response to an influenza pandemic", *Tourism Management,* Vol.27 No.3, pp.361-393.

Palmié, M., Huerzeler, P., Grichnik, D., Keupp, M. M., and Gassmann, O. (2019), "Some principles are more equal than others: promotion- versus prevention-focused effectuation principles and their disparate relationships with entrepreneurial orientation", *Strategic Entrepreneurship Journal*, Vol. 13 No. 1, pp.93-117.

Pappas, N. (2019), "UK outbound travel and Brexit complexity", *Tourism Management*, Vol. 72, pp.12-22.

Pappas, N. (2021), "COVID19: holiday intentions during a pandemic", *Tourism Management*, Vol. 84, pp.1-10.

Paraskevas, A. and Altinay, L. (2013), "Signal detection as the first line of defence in tourism crisis management", *Tourism Management*. Vol. 34 No. 1, pp. 158-171.

Paraskevas, A., Altinay, L., Mclean, J. and Cooper, C. (2013), "Crisis Knowledge in Tourism: Types, Flows and Governance", *Annals of Tourism Research*, Vol. 41 No. 1, pp. 130-152.

Park, H., Kline, S. F., Kim, J., Almanza, B., and Ma, J. (2019), "Does hotel cleanliness correlate with surfaces guests contact?", *International Journal of Contemporary Hospitality Management*, Vol. 31 No. 7, pp.2933-2950.

Pearce, P. L. and Foster, F. (2007), "A 'university of travel': backpacker learning", *Tourism Management*, Vol. 28 No. 5, pp.1285-1298.

Prentice, C., Altinay, L. and Woodside, A. G. (2021), "Transformative service research and COVID-19", *The Service Industries Journal,* Vol. 41 No. 1-2, pp. 1-8.

Prideaux, B., Laws, E., and Faulkner, B. (2003), "Events in Indonesia: exploring the limits to formal tourism trends forecasting methods in complex crisis situations", *Tourism Management*, Vol. 24 No. 4, pp.475-487.

Pung, J. M., Gnoth, J., and Del Chiappa, G. (2020), "Tourist transformation: towards a conceptual model", *Annals of Tourism Research*, Vol. 81, pp.1-12.

Rathmell, J.M. (1966), "What is meant by services?", *Journal of Marketing*, Vol. 30 No. 4, pp.32-36.

Reddy, M. V., Boyd, S. W., and Nica, M. (2020), "Towards a post-conflict tourism recovery framework," *Annals of Tourism Research*, Vol.84, pp. 1-15.

Ritchie, B. W. and Jiang, Y. (2019), "A review of research on tourism risk, crisis and disaster management: launching the annals of tourism research curated collection on tourism risk, crisis and disaster management", *Annals of Tourism Research*, Vol. 79, pp. 1-15.

Rivera, M., Kizildag, M., and Croes, R. (2021), "Covid-19 and small lodging establishments: a break-even calibration analysis (CBA) model", *International Journal of Hospitality Management*, Vol. 94, pp. 1-7.

Robledo, M. A. and Batle, J. (2017), "Transformational tourism as a hero's journey", *Current Issues in Tourism*, Vol. 20 No. 16, pp.1736-1748.

Sarasvathy, S.D. (2009), *Effectuation: Elements of entrepreneurial expertise,* Edward Elgar Publishing, Cheltenham.

Scigliuzzo, D., Saul, J., Harrington, S. D., Boston, C., and Pogkas, D. (2020), "The Covid Bankruptcies: Guitar Center to Youfit", *Bloomberg,* available at: https://www.bloomberg.com/graphics/2020-us-bankruptcies-coronavirus/ (Accessed 19/06/2021).

Scott, N. and Laws, E. (2006), "Knowledge sharing in tourism and hospitality", *Journal of Quality Assurance in Hospitality & Tourism*, Vol. 7 No. 1-2, pp.1-12.

Seyitoglu, F. and Ivanov, S. (2020), "A conceptual framework of the service delivery system design for hospitality firms in the (post-) viral world: the role of service robots", *International Journal of Hospitality Management*, Vol. 91, pp. 1-10.

Shin, H. and Kang, J. (2020), "Reducing perceived health risk to attract hotel customers in the COVID-19 pandemic era: focused on technology innovation for social distancing and cleanliness", *International Journal of Hospitality Management*, Vol. 91, pp. 1-9.

Shin, H., Perdue, R. R., and Kang, J. (2019), "Front desk technology innovation in hotels: a managerial perspective", *Tourism Management*, Vol. 74, pp.310-318.

Shiu, Y. M. and Yu, T. W. (2010), "Internal marketing, organizational culture, job satisfaction, and organizational performance in non-life insurance", *The Service Industries Journal*, Vol. 30 No. 6, pp.793-809.

Shostack, G. L. (1977), "Breaking free from product marketing", *Journal of Marketing*, Vol. 41 No. 2, pp.73-80.

Sohrabi, C., Alsafi, Z., O'Neill, N., Khan, M., Kerwan, A., Al-Jabir, A., ... and Agha, R. (2020), "World Health Organization declares global emergency: a review of the 2019 novel coronavirus (COVID-19)", *International Journal of Surgery,* Vol. 76, pp.71-76.

Soulard, J., McGehee, N. G., and Stern, M. (2019), "Transformative tourism organizations and glocalization", *Annals of Tourism Research*, Vol. 76, pp.91-104.

Speakman, M. (2017), "A paradigm for the twenty-first century or metaphorical nonsense? the enigma of complexity theory and tourism research", *Tourism Planning & Development*, Vol. 14 No. 2, pp. 282-296.

Speakman, M. and Sharpley, R. (2012), "A chaos theory perspective on destination crisis management: evidence from Mexico", *Journal of Destination Marketing & Management*, Vol. 1 No. 1–2, pp.67-77.

Tang, T. C. and Wong, K. N., (2009), "The SARS epidemic and international visitor arrivals to Cambodia: is the impact permanent or transitory?", *Tourism Economics*, Vol. 15 No. 4, pp. 883-890.

Tansuhaj, P., Randall, D., and McCullough, J. (1988), "A services marketing management model: integrating internal and external marketing functions", *Journal of Services Marketing*, Vol. 2 No. 1, pp.31-38.

Teng, Y. M., Wu, K. S., and Lin, K. L. (2020), "Life or Livelihood? Mental Health Concerns for Quarantine Hotel Workers During the COVID-19 Pandemic", *Frontiers in Psychology*, Vol. 11 No. 1, pp. 1-4.

The Khoa, D., Wang, C. Y. and Guchait, P. (2021), "Using regulatory focus to encourage physical distancing in services: when fear helps to deal with Mr. Deadly COVID-19", *The Service Industries Journal*, Vol. 41 No. 1-2, pp. 32-57.

Valeri, M. and Baggio, R. (2020), "Social network analysis: organizational implications in tourism management", *International Journal of Organizational Analysis,* Vol. 29 No. 2, pp.342-353.

Vargo, S. L. and Lusch, R. F. (2008), "From goods to service (s): divergences and convergences of logics", *Industrial Marketing Management*, Vol. 37 No. 3, pp.254-259.

Verleye, K. and Gemmel, P. (2011), "Innovation in the elderly care sector–at the edge of chaos", *Journal of Management & Marketing in Healthcare*, Vol. 4 No. 2, pp. 122-128.

Wolf, I. D., Ainsworth, G. B., and Crowley, J. (2017), "Transformative travel as a sustainable market niche for protected areas: a new development, marketing and conservation model", *Journal of Sustainable Tourism*, Vol.25 No.11, pp.1650-1673.

Wyckham, R.G., Fitzroy, P.T., and Mandry, G.D. (1975), "Marketing of services: an evaluation of the theory", *European Journal of Marketing,* Vol. 9 No. 1, pp.59-67.

Yang, K., Kim, J., Min, J. and Hernandez-Calderon, A. (2021), "Effects of retailers' service quality and legitimacy on behavioral intention: the role of emotions during COVID-19", *The Service Industries Journal*, Vol. 41 No.1-2, pp. 84-106.

Zahra, A. and Ryan, C. (2007), "From chaos to cohesion – complexity in tourism structures: an analysis of New Zealand's regional tourism organizations", *Tourism Management*, Vol. 28 No. 3, pp.854-862.

Zeithaml, V. A., Parasuraman, A., and Berry, L.L. (1985), "Problems and strategies in services marketing", *Journal of Marketing*, Vol. 49 No. 2, pp.33-46.

Zeng, Z., Chen, P. J., and Lew, A. A. (2020), "From high-touch to high-tech: COVID-19 drives robotics adoption", *Tourism Geographies*, Vol. 22 No. 3, pp.724-734.

Zhang, H., Song, H., Wen, L., and Liu, C. (2021), "Forecasting tourism recovery amid COVID-19", *Annals of Tourism Research*, Vol. 87, pp.103149.

Zwanka, R. J. and Buff, C. (2021), "COVID-19 generation: a conceptual framework of the consumer behavioral shifts to be caused by the COVID-19 pandemic", *Journal of International Consumer Marketing*, Vol. 33 No. 1, pp.58-67.
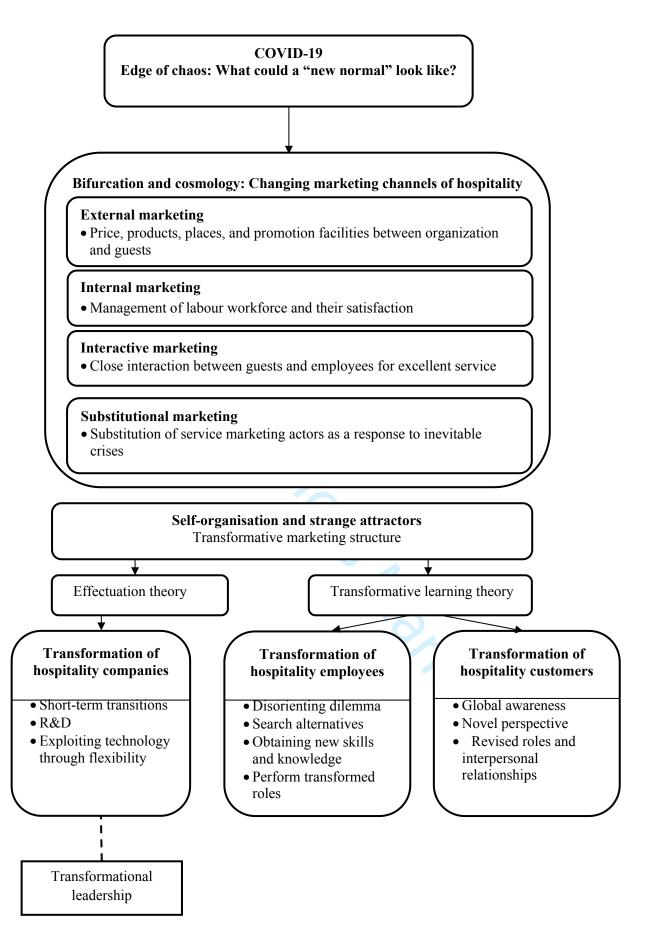
Figure 1: Proposed conceptual framework for the transformation of the hospitality services marketing structure.