

Fixed iPad Technology as an Innovation Idea in Chain Accommodation Businesses

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Abstract

In this study "Fixed iPad" technology is proposed as an innovative idea in chain accommodation businesses. The use of the proposed technology in accommodation businesses has been discussed and evaluated. In this study, the Diffusion of Innovations Theory is adopted. The idea of a "Fixed iPad" has been proposed to chain accommodation businesses. MAXQDA analysis program was used to visualize the data. The study showed that standards, suitability for the target, cost, and infrastructure are crucial determinants of innovation processes. It has been determined that chain accommodation enterprises cannot make decisions outside the standards. It has been determined that conducting R&D studies can be beneficial in innovation processes. In general, there is the opinion that the proposed innovation can have a positive effect on performance, satisfaction, and competition. A framework for the acceptance of innovations has been developed for chain accommodation businesses. This framework can be a prediction of innovation behavior toward chain accommodation businesses.

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INTRODUCTION

A global competitive environment directs accommodation businesses to sustainable change and development. The hospitality industry is one of the most competitive industries. Creative and innovative activities have become a necessity for accommodation businesses that want to maintain and increase their market share. These developments push accommodation businesses to seek innovative solutions (Anderson et al., 2014; Carlborg et al., 2014; Chen, 2011).

Innovation capacity is a requirement to be successful in a globally competitive environment. It is a strategy that businesses should implement. Innovative strategies are important for businesses to stay strong at the level of organizational competition (Lin, 2013). Accommodation businesses can carry out technological and non-technological innovation processes (Černe et al., 2016). Technological innovations can offer solution-oriented approaches to businesses. Non-technological innovations are steps that have an impact on the business processes of the accommodation businesses. These can be new approaches to the commercialization of company assets (Gambardella & McGahan, 2010), structural, managerial, and technical processes (Birkinshaw et al., 2008), reorganizing business processes, identifying alternative pathways for employees (Tracey & Way, 2011), and developing stakeholder relations (Raub & Martin-Rios, 2019).

It can be said that service innovations have an impact on economic growth (Den Hertog et al., 2010). Innovation refers to the introduction and application of new concepts such as service, product, and process. Innovations in the tourism and hospitality industry are often developed through new hotel services, technologies, and new attractions in a destination that enhances the tourist experience (Buhalis & Sinarta, 2019). One way to increase innovation capacity in the hospitality industry is knowledge sharing. Effective and sustainable information sharing will be possible with the establishment of cooperation and coordination in the enterprise. Employees should be encouraged and motivated. The orientation of accommodation businesses towards innovation and productivity can bring long-term and sustainable success. In this context, a learning, encouraging, and innovative organizational structure is required (Yang, 2004; McLeod et al., 2010).

Accommodation businesses are aware of the innovation expectations of their customers (Kallmuenzer, 2018; Tajeddini & Trueman, 2012). Therefore, they constantly try to innovate in order to compete in the market (Thomas & Wood, 2014). However, these innovations are mostly incremental innovations of products and services, often due to limited financial capacities (Pikkemaat & Peters, 2006). Employees' ideas are considered one of the main drivers of innovation (McGrath, 2008). In this context, managers should support their employees, and a learning and creative organizational culture should be created (Zopiatis & Theocharous, 2018).

It is a need for accommodation establishments to renew and develop themselves. Therefore, it is useful to examine the innovation understandings and practices in accommodation businesses (Karlsson & Tavassoli, 2016; Tavassoli & Karlsson, 2016; Zopiatis & Theocharous, 2018). Although the literature supports that there are studies on the concept of innovation in accommodation businesses (Martin-Rios & Ciobanu, 2019; Gomezelj, 2016; Martin-Rios & Pasamar, 2018), it is a necessity to examine innovative ideas and solutions in this regard (Nicolau & Santa-Maria, 2013; Karlsson & Tavassoli, 2016; Tavassoli & Karlsson, 2016; Zopiatis & Theocharous, 2018; Uygur et al., 2019; Luu, 2019; De Larrea et al., 2021; Lim & Ok, 2021; Shin & Perdue, 2022). In this study "Fixed iPad" technology is proposed as an innovative idea in chain accommodation businesses. The use of the proposed technology in

accommodation businesses has been discussed and evaluated. This innovation is aimed that guests can perform their transactions faster and increase their satisfaction. It is aimed to place the "fixed iPad" technology in the rooms and to enable the guest to perform various operations on this iPad. The system is supported by the necessary information systems, allowing the guest to easily perform various operations such as "call room service, request his room to be cleaned, get a price to extend his/her stay if he/she is satisfied, access the necessary contact phones for restaurant reservations, city transportation, and express his/her complaints and requests" is targeted.

In this context, the aim of this research is;

- Evaluating the possibility of using "Fixed iPad" technology in accommodation establishments,
- Evaluating the attitudes of chain accommodation businesses towards the proposed innovation idea,
- To be able to identify the factors affecting the innovation acceptance of chain accommodation businesses,
- To examine the innovative works of chain accommodation businesses.

By proposing the idea of a "Fixed iPad" in the study, a framework was developed for the acceptance of innovations by chain accommodation businesses. This framework can be a prediction of innovation behavior toward chain accommodation businesses.

Literature Review

Innovation

Innovation is the implementation of a new or significantly improved product or process, a new organizational or marketing method in business processes, organization, and relationships. Businesses may have different preferences for innovation strategies. In general, four types of innovation are mentioned in the literature. These; process, product/service, marketing, and organizational innovation (Hjalager, 2010; Gomezelj, 2016).

Product/service innovation refers to the development and promotion of a new service or product. In the service sector, it is generally expressed as service innovation. It is the use of combinations of new or existing knowledge and technologies. The goal is to create new activities, reduce costs, and open new market paths. It is expected to provide a competitive advantage through these innovations (Evangelista & Vezzani, 2010; Lehtinen & Järvinen, 2015).

Process innovation is the application of new or significantly improved service delivery methods. It is aimed to increase service quality and reduce costs (Oslo Manual, 2005).

Organizational innovation includes the application of a new method in business practices, organization, and relations of the enterprise, which aims to increase the performance and effectiveness of businesses (Oslo Manual, 2005). It is a more abstract and enterprise-specific type of innovation. It is an important type of innovation to adapt to changing market conditions (Armbruster et al., 2008; Martin-Rios and Parga-Dans, 2016). It can be a decisive factor in promoting innovation initiatives within the business (Martínez-Ros & Orfila-Sintes, 2012).

Marketing innovations refer to the use of a new marketing method that has not been used before, including promotion, pricing, design, product placement, and packaging (Oslo Manual, 2005). Thus, customers' needs can be met, new market opportunities can be created and sales can be increased. The relevant literature shows that service firms can gain a competitive advantage with successfully implemented marketing innovation (Scaglione vd., 2009; Line & Runyan, 2012).

While service and process innovations are closely related to technological developments, organizational and marketing innovations generally refer to non-technological processes (Černe et al., 2016).

The Diffusion of Innovation Theory

The "Diffusion of Innovation Theory", put forward by Everett M. Rogers in 1983, is the theory that explains the four elements that affect the spread of a newly formed idea, including communication channels, time, innovation, and social system. According to Rogers, innovation is a method, object, or thought that is perceived as new. Diffusion is the state of being accepted and adopted by the members of the social system through communication channels in a certain period. Rogers has gathered the stages for the adoption of innovation under five headings. These; are information, persuasion, decision, implementation, and approval processes. As the first step of the theory, the knowledge gained by the individual about innovation is expressed in the information process. In the second stage, the benefits and harms of the acquired knowledge and the innovation are evaluated. The third stage is the stage where acceptance or rejection decisions are made. The fourth stage, the application, refers to the process after the admission decision. In the final stage, the approval process takes place. According to Rogers (1983) diffusion of innovation theory, the adoption of innovation depends on the variables of relative advantage, compatibility, complexity, trialability, and observability. Relative advantage is the degree to which an innovation is perceived as better than the current idea. At this point, the important thing is that the individual perceives the innovation as advantageous. Compatibility refers to the degree to which the innovation is consistent with current value, experience, and needs. The compatibility of the innovation will also ensure rapid adoption. Complexity is the degree to which an innovation is perceived as difficult to understand and use. Innovations with a more complex system will be more difficult to adopt. Trialability is the finding of a trial limit for innovation. Since it will be possible to learn by doing with a trialable innovation, the innovation will be adopted faster. Observability is the degree to which the results of an innovation are visible to others. The easier it is for individuals to see the results of an innovation, the more likely they are to adopt it. The "Diffusion of Innovation Theory" developed by Rogers (1983) is shown in Figure 1.

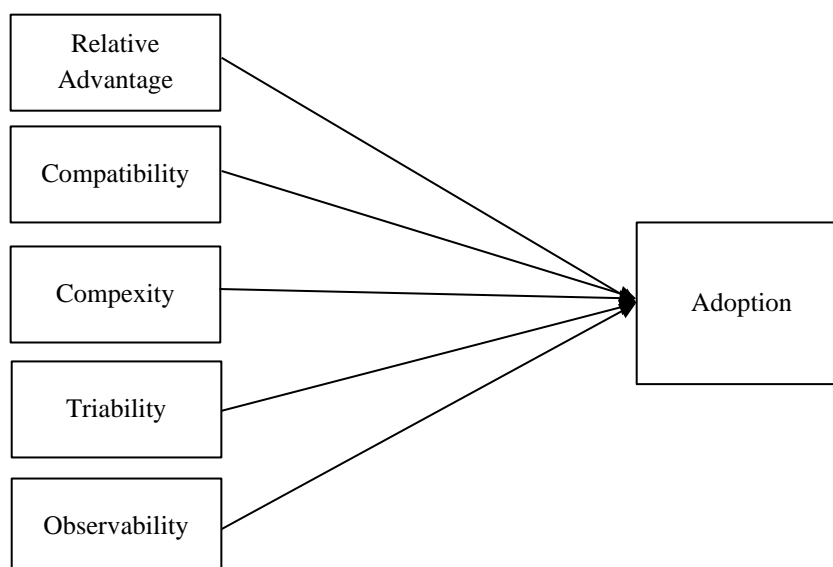


Figure 1. The Diffusion of Innovation Theory (Rogers, 1983)

Innovation in accommodation businesses

Big data has a positive impact on innovations in the hospitality industry (Kim and Lee, 2013). Knowledge through the use of information technology facilitates innovation (Garcia-Alvarez, 2015). Kim and Lee (2013) suggested that knowledge has a positive effect on service innovation in the hospitality industry. Hu et al. (2009) suggest that there is a positive relationship between knowledge and service innovation in the hospitality industry. Big data in accommodation businesses encompass all information about customers, products, competitors, services, operational processes, and employees. It should be used by the objectives of the accommodation business (Yang and Wan, 2004). Big data enables businesses to explore unexpected areas that are crucial (Kim & Lee, 2013). Big data represents a source of innovation and learning (Jiménez-Zarco et al., 2015). It will be able to provide information service innovations based on big data. Accommodation businesses can better understand their customer's preferences and desires (Donate & de Pablo, 2015). Shamim et al. (2021) examined the impact of big data management on service innovation and online ratings. The study results reveal that big data management leads to high online ratings through knowledge creation and service innovation.

Employees are another factor that leads accommodation businesses to succeed in innovation. It is important to direct, encourage and motivate employees to innovate. The literature supports the role of employees in creating a learning organization culture and in differentiation (Zhou & Shalley, 2003). Leading French hospitality chain Accor has developed Innovaccor, an online tool for employees to encourage innovation. With this tool, it is ensured that the employees develop creative ideas and recommend the best practices. Accor Group implemented 2000 ideas proposed by its employees in 2011 (Hassanien & Dale, 2013).

Kallmuenzer (2018) emphasized that innovation in accommodation businesses is driven by four main actors. Entrepreneurs and employees are the main drivers of internal innovation, while guests and competitors are external innovation drivers.

Zopiatis and Theocharous (2018) examined the role of human capital and administrative workers in innovation initiatives in accommodation businesses. The findings of the study show the positive effects of managers' innovation action on perceived innovation culture and organizational support in accommodation businesses. Thus, employees can be encouraged to innovate and take risks with their creative and innovative ideas.

Martin-Rios and Ciobanu (2019) examined accommodation innovation strategies. In their study, they examined combinations of technological and non-technological innovations and evaluated their role in organizational performance. The results of the study show that the accommodation sector is at a low level in terms of innovative service activity. In addition, it was concluded that the accommodation business is associated with complex innovation strategies.

González-González and García-Almeida (2021) examined the role of creativity, knowledge, and motivation of front office workers in hospitality businesses in innovation. The study results showed that the creativity, work experience, and motivation of the employee increased the number of innovative proposals in the context of the front office department.

Lim and Ok (2021) examined the role of empowering leadership in the ability to acquire and apply knowledge in hospitality businesses. They aimed to investigate the operation between empowering leadership and innovation. The

results of the study show that empowering leadership has a positive relationship with the ability to acquire and apply knowledge.

Breier et al. (2021) examined the role of business model innovation in the hospitality industry during the COVID-19 crisis. The study results show that business model innovation can be beneficial for overcoming crises like COVID-19 and creating new revenues during and after the crisis.

Ebersberger et al. (2021) examined the innovation strategies of accommodation businesses. The results of the study show that three strategies can be strongly associated with hospitality business performance. These; are process and organizational innovation, product innovation, and marketing innovation.

De Larrea et al. (2021) critically examined innovation studies in hospitality and tourism. In the study, it was evaluated under the headings of innovation as an economic, social, and market phenomenon. The results of the study suggest that studies of innovation should be developed within the framework of economic, social, and market phenomena.

Yang et al. (2021) examined the relationship between team-oriented transformational leadership and innovation. The results show that team-oriented transformational leadership encourages innovation.

Styvén et al. (2022) examined employee perceptions of employers' creativity and innovation. The study results show that many employees perceive their work as creative. It also shows that the possibility of being creative and innovative in the workplace is a key driver for employees to stay with their current employer.

Dang and Wang (2022) examined the role of green intellectual capital and green innovation in creating competitive strategies in hospitality businesses. The results of the study reveal the positive effect of green innovation on competitive strategies. Green strategy, structural and relational capital can also positively affect innovation management and competitive advantage.

De Andrés-Sánchez et al. (2022) examined the impact of innovation on competitive advantage in SMEs in the Portuguese hospitality sector. The results of the study reveal that inbound open innovation plays a fundamental role in gaining a competitive advantage for products and services.

Kim et al. (2022) examined the adoption of a central bank digital currency (CBDC) as a payment method in the hospitality and tourism industries. The results of the study show that the characteristics of innovations (relative advantage, compatibility, and observability) have a significant impact on people's adoption process for CBDC payment.

The relevant literature reveals that innovation should be brought into the business culture as a strategy in accommodation businesses and that sustainable development should be adopted with the understanding of learning organizations by including its employees in the understanding of innovation. In addition, it is recommended to examine and implement innovation based on big data and R&D activities. It is expected that the business will take decisions in line with its own goals, taking into account the suggestions of the target audience. In this respect, innovation strategies are expected to be decisions that will contribute to marketing, customer satisfaction, and competition.

Methodology

In this study, the innovation perceptions of four five-star chain accommodation businesses were evaluated. Accommodation businesses are located in the Yenimahalle district of Ankara province in Turkey. There are seven five-star chain accommodation businesses in the same district (Ankara Provincial Directorate of Culture and Tourism, 2019). Interviews were held with four of these businesses. In this context, a return rate of 57% is mentioned. The reason for choosing the businesses in this district is that Ankara has a business-centered tourism understanding, and the competitive environment among accommodation businesses is high. These businesses are also close to the Turkish Grand National Assembly. It can be mentioned that there is a market where business tourism and competition are intense. In this environment, it is a matter of curiosity for businesses to differentiate themselves and their understanding of innovation. The interviews were held in September-November 2019. The average of the interviews is 30 minutes. The content analysis method was used for data processing. Thanks to content analysis, data can be divided into themes and categories (White & Marsh, 2006). Then, coding and grouping processes were carried out. The encoded data was supplemented using direct quotations. MAXQDA analysis program was used to visualize the data. Mapping was carried out with the "Hierarchical Code-Subcode Model". MAXQDA is one of the analysis programs used in qualitative research (Gizzi & Rädiker 2021). As a result of the study, the usability of the fixed iPad idea in accommodation businesses was evaluated.

The questions in the relevant literature were used in the study (Brooker et al., 2012; Cobos et al., 2016). The questions asked to the managers within the scope of the study are as follows:

1. Do you think the idea of a "Fixed iPad" will help your business achieve its goals?
2. Do you think this innovation idea is viable?
3. What are the downsides of this new product and how can it be improved?
4. What do you think will be the effects on the performance and customer satisfaction of the business if the product development is realized?
5. Do you think this idea will help you gain a competitive advantage over your competitors?
6. What kind of innovations do you implement in your business that will make you different from other accommodation businesses? Can you explain with examples?

Results

Within the scope of the study, the officials of four chain accommodation businesses were interviewed (one authorized manager from each business). The officials are knowledgeable about the innovation of accommodation businesses. They have a command of the operation of the business, are effective in management, have been working in the same business for at least seven years, and have an average of 15 years of experience. The fact that the participants are competent in management and have sufficient knowledge about the sector and business shows that a suitable participant profile has been reached.

The data obtained in the research were processed with coding. In this context, the MAXQDA program was used. A total of 62 coding processes were carried out. The map of the data with the Hierarchical-Code-Subcode model is as follows:

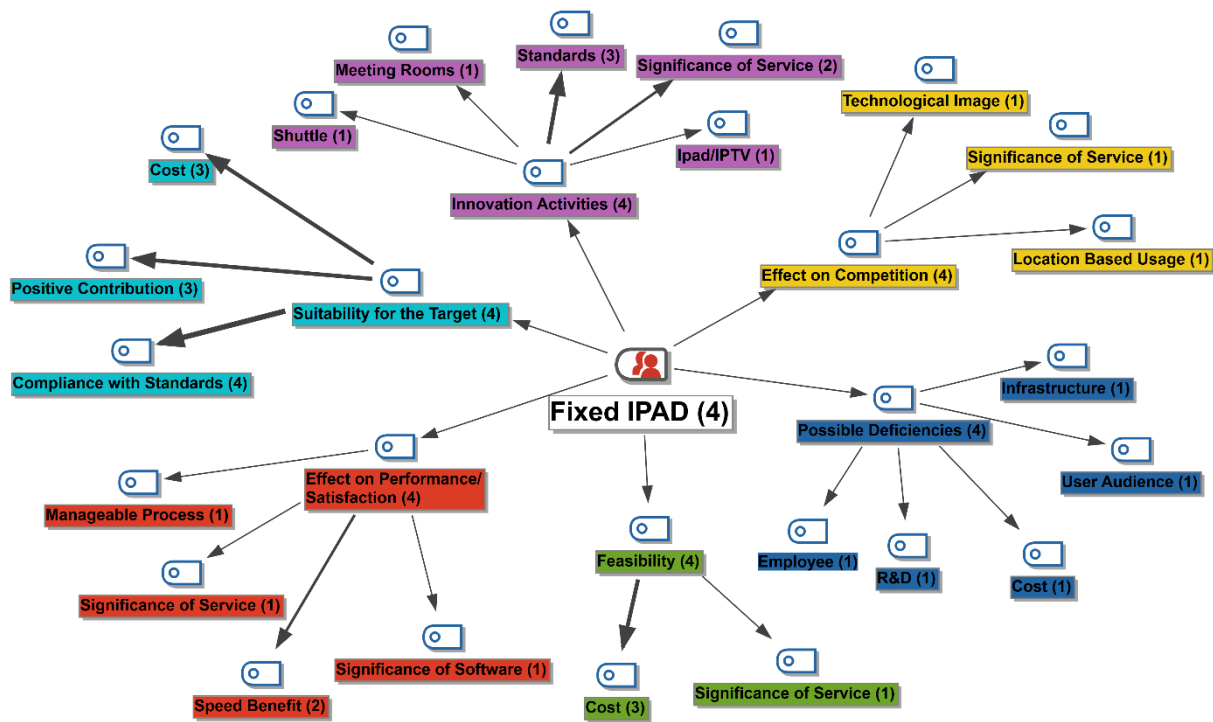


Figure 2. Hierarchical-Code-Subcode model

The data coded according to the answers of the participants were grouped (Figure 2). The groupings are as follows: suitability for the target, feasibility, possible deficiencies, effect on competition, effect on performance/satisfaction, and innovation activities.

Suitability for The Target

The theme of suitability for the target is the compatibility of the targets set by the accommodation businesses with the idea of a “Fixed iPad”. In this theme, the question of how the innovation idea is compatible with the goals of the enterprise is examined. Participants emphasized standards in this theme. Considering that the participants are a chain accommodation business, it is expected that the decisions will be made based on central management and within the framework of certain standards. There are certain service standards of a chain accommodation business. The same services are offered in the accommodation business of the chain located in a different destination. This is also true for innovation decisions and processes. All of the participants agree on this issue. K2 coded participant mentioned the importance of standards in business processes.

K2: “There are certain standards in chain accommodation businesses and these standards cannot be exceeded. Even the places of slippers and tv remotes are clear in our rooms. We cannot go beyond this. This is also the case with innovations. As for the fixed iPad idea, it could help the business goals.”

Another prominent statement is cost. The costs of technological innovations can negatively affect businesses in some cases. The subject should be evaluated in terms of benefit-value. It should be worth the cost. In this context, 3 participants claim that they approach the fixed iPad idea positively in terms of cost and will contribute.

Feasibility

The theme of feasibility refers to the viability of an innovation. An innovation that is not viable cannot be realized and is not sustainable. Participants mentioned the importance of cost in this theme. Innovations that are affordable

and worth the investment can be seen as viable. Considering the number of rooms, it was foreseen that the idea of a Fixed iPad could lead to a serious cost.

K4: “It is definitely a viable innovation, but the cost is so important. We have 250 rooms, and there may be a serious cost.”

Possible Deficiencies

Possible deficiencies refer to aspects of the innovation that may be lacking if implemented. It can be said that innovation can be more beneficial if the deficiencies are improved. Participants mentioned the terms infrastructure, cost, user audience, personnel, and R&D activities. The participant-coded K2 evaluated the possible deficiencies of this innovation in terms of infrastructure, cost, and user audience.

K2: “I think that this new product does not apply to every business and not every accommodation business is that compatible with technology. Technology doesn't always work for everyone. In addition, the negative aspects of iPad technology should not be ignored when the application is started. There will also be those who break them, do not see them, and call reception. Thus, it will create a serious cost. Considering the age range in accommodation, it is a technology that can be used by the age range of 25-45. However, it is an innovation that will be difficult for our guests outside of this age range to use.”

K3 coded participant stated the importance of R&D activities.

K3: “First of all, R&D activities must be carried out to realize this new product. I foresee that it can be implemented if a company can be negotiated and budgeting is provided. The staff should also be competent.”

Effect on Performance, Satisfaction and Competition

This theme is related to the possible positive effects of the innovation idea on the business. These effects are business performance, user satisfaction, and competitive advantage. Participants stated that the idea of innovation will provide speed benefits, and that software and a manageable process are important for effective use of the system.

Participants with the code K1 and K3 think that this innovation can create speed benefits and contribute positively to customer satisfaction.

K1: “I think that with this innovation, guests will be able to solve their problems more quickly, the flow of service will flow faster, and thus customer satisfaction will increase. The faster the service is provided, the higher the customer satisfaction will increase.”

K3: “If this new product is realized, it will have positive contributions to customer satisfaction. We may not like to be in dialogue and we all have limited time. This is for everyone. I believe that the level of satisfaction of the customer will increase as there is an application that can speed up the process.”

Participant with the code K4 mentioned the process and the software.

K4: “The most important thing I can say about this innovation is that it should be manageable. We have 250 rooms and when we place an iPad in each of these rooms, the system should be managed successfully and the guest should not be unhappy. Software and management are very important here.”

Participants think that the idea of innovation will contribute to competitive advantage. Participant K1 thinks that

this innovation idea will be beneficial for the company in terms of technological image.

K1: “It is an innovation that can make a difference in terms of competitive advantage. There will be additional benefits. The guest will think “what a technological hotel” and it will have an impact on our name in the market.”

Participant K3 stated that this innovation can be used on a location-based basis.

K3: “This innovation can give us an advantage over our competitors. It's a different app. Convenience regarding urban transportation can be provided. For example, if we talk about this location, our guests will have the opportunity to reach the Armada shopping center and see the products of the companies in the Armada shopping center from their iPad. We describe to our guests that you can walk through the street of life. However, if this application is implemented, our guests can see how to go to Armada in 3D. Finally, you can add: Looking at innovation as a location, I think iPad technology can contribute to us.”

The participant with the code K2 believes that the understanding of service rather than technology will create more advantages in competition.

K2: “We believe that we can make a difference in services by creating behavioral standards with personnel training rather than technological developments in our business. Our standards are based on the perspective of “listen, identify the problem, apologize, empathize, and find a solution”. Adopting these, it is aimed to transfer behavioral standards in services. Even if it doesn't fit every business, I believe this innovation can contribute to a competitive advantage when implemented.”

Innovation Activities

This theme is associated with the innovation activities of accommodation businesses. Accommodation businesses have given examples of innovation activities. Participants stated that standards are determinants in chain accommodation businesses. In this respect, they think that the innovation decision to be taken should be based on the decision of the central management. The thoughts of the participant coded K1 on the subject are as follows:

K1: “If we talk about the innovation activities related to our business, we can't take any steps without consulting the central IT. It is a chain hotel business and it is not possible to make independent decisions. In our enterprise, first of all, necessary personnel training and personal skill development training are in question. We also talk about how we can improve our services at meetings every year. It is discussed the answers to the questions of how we can improve ourselves and what kind of difference we can make.”

K1 coded participant mentioned an innovation that was on their agenda.

K1: “Another new idea on our agenda is to use a shuttle for airport transportation and to serve the guests with a fixed iPad with 5G in this shuttle. There are not many businesses that implement the shuttle to the airport and we think that this issue can make a difference for us. Apart from this, IPTV over Network is used on the TVs in the rooms. Thanks to this IPTV, all kinds of channels that are not on terrestrial broadcast are offered to our guests.”

Participant with the code K3 expressed the innovations in the meeting rooms.

K3: “The walls in our meeting rooms can enter different modes from each other. Our business was the first to do this, and a couple of other businesses have done it after us. The walls can turn into a forest or a country garden when

desired. For example, it can be Mecca during Ramadan. We have rooms that give oxygen. In addition, it is possible to write on the walls in our meeting rooms. These are special walls, these writings can be deleted later.”

Participants consider the idea of a “Fixed iPad” as a generally usable technology. They mentioned that since they are chain accommodation businesses, they cannot make decisions outside the standards and that the decision of the central management should be made. It is foreseen that one of the most important issues in this regard may be the cost. They think that conducting R&D studies can be beneficial. In general, the opinion that it can have a positive effect on performance, satisfaction, and competition is dominant. It will be able to create speed and image benefits. There is also the opinion that service is as important as technological innovations and that the main thing is to satisfy the guests in terms of service. Based on all these opinions of the participants, the “Innovation Acceptance Framework for Chain Accommodation Businesses” was prepared. The innovation acceptance framework is based on the Diffusion of Innovations Theory.

Discussion

The hospitality industry is one of the most competitive industries. It has become a necessity for accommodation businesses to focus on creative and innovative activities. Thus, accommodation businesses can increase their market share and earn more profits (Anderson et al., 2014; Carlborg et al., 2014; Chen, 2011). It is useful to examine the innovation understandings and practices in accommodation establishments (Karlsson & Tavassoli, 2016; Tavassoli & Karlsson, 2016; Zopiatis & Theocharous, 2018). Although studies have been carried out on this subject (Gomezelj, 2016; Martin-Rios & Pasamar, 2018), it is a necessity to examine innovative ideas and solutions in this regard (Nicolau & Santa-Maria, 2013; Karlsson & Tavassoli, 2016; Tavassoli & Karlsson, 2016; Zopiatis & Theocharous, 2018; Uygur et al., 2019; Luu, 2019; De Larrea et al., 2021; Lim & Ok, 2021; Shin & Perdue, 2022). In this study, the idea of a “Fixed iPad” is proposed. A framework has been developed specifically for the acceptance of innovations by chain accommodation businesses. This framework can be a prediction of innovation behaviour toward chain accommodation businesses.

In this study, 4 of 6 chain accommodation establishments located in the Yenimahalle district of Ankara province in Turkey were interviewed. The district, which is the center of business tourism, is also close to the Turkish Grand National Assembly. In addition, there is an intense competitive environment. In this environment, differentiation and innovation efforts of enterprises are inevitable. Interviews were held with the senior managers of the related chain accommodation businesses. The idea of a “Fixed iPad” was discussed and a framework for the acceptance of innovations was developed for chain accommodation businesses. The result of the research supports the literature. It has been concluded that the preparation of innovations by the user audience and R&D activities are important factors in the processes. The importance of big data can be mentioned in terms of the relationship between information and service innovation, and the literature also supports this outcome. Qualified personnel is also important in innovation processes (Hu et al., 2009; Kim and Lee, 2013, Garcia-Alvarez, 2015, Jiménez-Zarco et al., 2015; Donate & de Pablo, 2015; De Larrea et al., 2021). Qualified personnel can be seen as a necessity for the effective management of the process. The literature supports the importance of personnel in innovation processes (Zhou & Shalley, 2003; Yang & Wan, 2004; Hassanien & Dale, 2013; Kallmuenzer, 2018; Zopiatis & Theocharous, 2018; González-González & García-Almeida, 2021; Styvén et al., 2022). Innovations in accommodation establishments should not be considered only in terms of technology. The importance of service quality is another important finding of the study. The literature

also supports this view. Innovation is a combination of service, technology, and process (Martin-Rios & Ciobanu, 2019; Ebersberger et al. 2021; Dang & Wang, 2022). Innovation processes need to be manageable. Management activities are another determinant of success. In this respect, the role of management, leadership, and direction is critical. The literature supports the relationship between manager, leader, and innovation (Lim & Ok, 2021; Yang et al., 2021). Businesses can increase their performance and satisfaction rate and gain a competitive advantage through innovation processes. The literature also supports the positive relationship between innovation and performance (Breier et al., 2021; De Andrés-Sánchez et al., 2022). Components of the diffusion theory of innovations are also important factors in the processes of innovations. Relative advantage, compatibility, complexity, trialability, and observability are important factors in decisions. The Diffusion of Innovations Theory can be a guide for tourism businesses. The literature also supports this view (Kim et al., 2022). There are also aspects of the research results that differ from the literature. First of all, the decisions of chain accommodation enterprises are taken by the central management. In this context, the importance of the determined standards can be mentioned. Another issue is that innovations must be worth covering the costs in terms of benefit-value. This is especially true for technological innovations. In addition, there is the opinion that location-based use of innovations such as iPad will contribute to accommodation businesses. Another benefit of these innovations is image and speed. It will create a positive image for users. In addition, it will contribute positively to faster services.

Theoretical contribution

Innovation Acceptance Framework for Chain Accommodation Businesses

The acceptance framework of innovations has been developed within the framework of the Diffusion of Innovations Theory put forward by Rogers (Figure 2). In line with the answers of the participants, the variables affecting the diffusion of innovations were determined. Rogers has gathered the stages for the adoption of innovation under five headings. These; are knowledge, persuasion, decision, implementation, and confirmation. As the first step of the theory, the knowledge gained by the individual about innovation is expressed in the information process. In the second stage, the benefits and harms of the acquired knowledge and the innovation itself are evaluated. The third stage is the decision to accept or reject. The fourth stage, the application, refers to the process after the acceptance decision, and in the last stage, the confirmation process takes place.

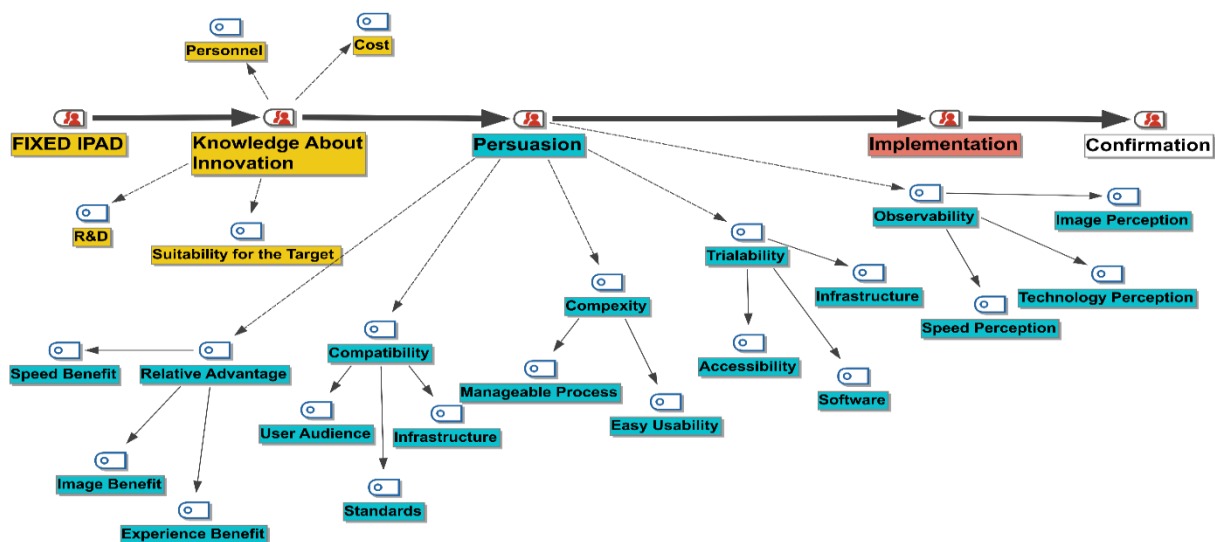


Figure 2. Innovation Acceptance Framework for Chain Accommodation Businesses

In this study, the determinants of the two stages were determined and the factors that were effective in the decision process were determined. The first stage is the “Knowledge About Innovation” process. According to the data obtained, the determinants of the first stage are the compliance of the innovation with the objectives of the accommodation businesses, the competence of the personnel, the cost of the innovation, and the R&D activities on the innovation. Businesses with sufficient knowledge about innovation will be able to move on to the persuasion process.

The persuasion process consists of five determinants. These are relative advantage, compatibility, complexity, trialability and observability.

Relative advantage is the degree to which an innovation is perceived as better than the current idea. At this point, the important thing is to perceive the innovation as advantageous. According to the data obtained, the determinants of relative advantage are speed benefit, image benefit, and experience benefit. In this context, businesses will be able to turn to innovations that contribute to their processes in terms of speed, image, and experience.

Compatibility means that the innovation is appropriate to the current value, experience, and needs. The compatibility of the innovation will also ensure rapid adoption. The determinants of compliance are infrastructure, standards, and user audience. Standards are one of the important determinants in chain accommodation businesses. The central management should approve the innovation-decision and implement it in the enterprises by the standards. The second determinant is infrastructure. Sustainable and effective use of technological innovation is not possible without infrastructure. Another determinant is the user audience. The innovation considered should be by the wishes and expectations of the user audience.

Complexity is the degree to which an innovation is perceived as difficult to understand and use. Innovations with a more complex system will be more difficult to adopt. The determinants of complexity are manageable processes and easy usability. A new system or innovation must be manageable. An easily managed process will be effective and beneficial. Another determinant is easy usability. The innovation should be easy to use by users and should be in a system that is simple to use.

Trialability means that the innovation has a trial limit. It will be possible to learn by doing with an innovation that can be tried. Thus, the innovation will be adopted faster. The determinants of testability are accessibility, software, and infrastructure. It cannot be said that an inaccessible innovation is testable. Other determinants are software and infrastructure. The software and infrastructure of technological innovations should be designed in the right system and presented to users. An innovation that is not designed in the right system will not be able to work effectively and efficiently.

Observability is the degree to which the results of an innovation are visible to others. The easier it is for individuals to see the results of the innovation, the more likely they are to adopt it. The determinants of observability are image perception, speed perception, and technology perception. When implementing an innovation process, managements consider the possible returns of innovation. They perform the benefit-value analysis. While this is the case, it is expected that innovation will create image benefits for the business, accelerate service processes and create a perception of a technological accommodation business.

Within the framework of all these determinants, chain accommodation businesses can take innovation decisions

and carry out processes. The positive decision and the implementation of the innovation are due to the possible contributions of the innovation. In this case, the possible important effects of the determinants can be mentioned.

Practical Implication

The results of the study, it has been determined that chain accommodation enterprises implement decisions within the scope of the central management approach and act according to the relevant standards. An understanding of innovation can only be possible with a central management decision. Another prominent determinant is the cost. The cost of the innovation must be worth covering in the benefit-value analysis. It should have a high return on innovation. For this reason, R&D activities are suggested. If the innovation is related to technology, it is suggested to provide the infrastructure. Supporting innovation with infrastructure is not enough either. It should also be an innovation that is suitable for the use of the target audience, easy to use, accessible, and manageable. Staff must also be adequately qualified. In addition, service quality is also important in customer satisfaction and competition. Innovation efforts of accommodation businesses are aimed at business tourism. There are innovations mentioned in meeting rooms, such as the airport shuttle service.

Limitation and Further Research

The research has limitations. Some suggestions can be made for future research. This research was carried out in the Yenimahalle district of Ankara province of Turkey. Studies can be carried out with a larger sample. In this research, the idea of a “Fixed iPad” is presented as an innovation. Research can be done with different types of innovations and concepts. There is a limited number of participants in the study. The scope can be expanded and the result more generalized. The qualitative analysis method was used in the study. Research can be done using quantitative or mixed analysis methods. The Diffusion of Innovations Theory was used in this research. The subject can be studied with different theories and models. Within the scope of the research, the idea of a Fixed iPad was put forward and the accepted framework of innovations for chain accommodation businesses was drawn from the perspective of the Diffusion of Innovations Theory. In this context, accommodation businesses can benefit from the acceptance framework of innovations in their innovation processes.

Conclusion

Accommodation businesses are located in the sector where competition is high. Businesses that renew themselves, differentiate, and act by the expectations of the target audience will be advantageous. It is inevitable for businesses that adopt a continuous development framework to gain a competitive advantage. While this is the case, accommodation businesses may benefit from improving themselves with product, service, process, and operational innovations. Innovative and creative culture can provide significant returns to accommodation businesses in terms of sustainable competitive advantage.

As a result of all the data obtained, an innovation acceptance framework for chain accommodation businesses has been developed from the perspective of the Diffusion of Innovations Theory. The process consists of 4 stages. The first stage is the process of knowledge about innovation. The determinants of the innovation knowledge process are R&D, suitability for the target, personnel, and cost. The information obtained about innovations will enable the transition to the persuasion process. The second stage is the persuasion process. The persuasion process takes place according to the outputs of the variables of relative advantage, compatibility, complexity, trialability, and

observability. The determinants of relative advantage are speed, image, and experience. In these themes, the innovation that will contribute to the business will be perceived as advantageous. The determinants of compliance are infrastructure, standards, and user audience. The innovation-decision to be taken should be compatible with the standards, the infrastructure of the enterprise, and the user audience. The determinants of complexity are manageable process and easy usability. A manageable and easy-to-use process will be adopted more quickly and used effectively. The determinants of trialability are infrastructure, accessibility, and software. Ensuring trialability is possible if the interface and use of the system are accessible, convenient, and usable. It is the software and infrastructure of the system that will provide this. The determinants of observability are speed, technology, and image perception. An innovation that is perceived positively by the user will provide significant returns to the business. These are key returns such as word of mouth, promotion, marketing, profitability, satisfaction, and competitive advantage. Within the framework of all these obtained components, accommodation businesses can decide to realize and implement innovations and renew their processes.

REFERENCES

- Anderson, N., Potocnik, K., & Zhou, J. (2014). Innovation and creativity in organizations: A state-of-the-science review, prospective commentary, and guiding framework. *Journal of Management*, 40(5), 1297-1333, <https://doi.org/10.1177/0149206314527128>.
- Ankara Provincial Directorate of Culture and Tourism (2019). <https://ankara.ktb.gov.tr/TR-152359/nerede-konaklanir.html>. [Date of Access: 19.06.2019]
- Armbruster, H., Bikfalvi, A., Kinkel, S., & Lay, G. (2008). Organizational innovation: The challenge of measuring non-technical innovation in large-scale surveys. *Technovation*, 28(10), 644–657. <https://doi.org/10.1016/j.technovation.2008.03.003>.
- Birkinshaw, J., Hamel, G., & Mol, M. (2008). Management innovation. *Academy of Management Review*, 33(4), 825–845. <https://doi.org/10.5465/amr.2008.34421969>.
- Brooker, E., Joppe, M., Davidson, M. C., & Marles, K. (2012). Innovation within the Australian outdoor hospitality parks industry. *International Journal of Contemporary Hospitality Management*, 24(5), 682-700, <https://doi.org/10.1108/09596111211237246>.
- Breier, M., Kallmuenzer, A., Clauss, T., Gast, J., Kraus, S., & Tiberius, V. (2021). The role of business model innovation in the hospitality industry during the COVID-19 crisis. *International Journal of Hospitality Management*, 92, 102723, <https://doi.org/10.1016/j.ijhm.2020.102723>.
- Buhalis, D., & Sinarta, Y. (2019). Real-time co-creation and nowness service: Lessons from tourism and hospitality. *Journal of Travel & Tourism Marketing*, 36(5), 563–582, <https://doi.org/10.1080/10548408.2019.1592059>.
- Carlborg, P., Kindström, D., & Kowalkowski, C. (2014). The evolution of service innovation research: A critical review and synthesis. *Service Industries Journal*, 34(5), 373-398, <https://dx.doi.org/10.1080/02642069.2013.780044>.
- Černe, M., Kaše, R., & Škerlavaj, M. (2016). Non-technological innovation research: Evaluating the intellectual

- structure and prospects of an emerging field. *Scandinavian Journal of Management*, 32(2), 69–85. <https://doi.org/10.1016/j.scaman.2016.02.001>.
- Chen, W. J. (2011). Innovation in hotel services: Culture and personality. *International Journal of Hospitality Management*, 30(1), 64-72, <https://doi.org/10.1016/j.ijhm.2010.07.006>.
- Cobos, L. M., Mejia, C., Ozturk, A. B., & Wang, Y. (2016). A technology adoption and implementation process in an independent hotel chain. *International Journal of Hospitality Management*, 57, 93-105, <https://doi.org/10.1016/j.ijhm.2016.06.005>.
- Dang, V. T., & Wang, J. (2022). Building competitive advantage for hospitality companies: The roles of green innovation strategic orientation and green intellectual capital, *International Journal of Hospitality Management*, 102, 103161, <https://doi.org/10.1016/j.ijhm.2022.103161>.
- De Andrés-Sánchez, J., Musiello-Neto, F., Rua, O. L., & Arias-Oliva, M. (2022). Configurational Analysis of Inbound and Outbound Innovation Impact on Competitive Advantage in the SMEs of the Portuguese Hospitality Sector. *Journal of Open Innovation: Technology, Market, and Complexity*, 8(4), 205, <https://doi.org/10.3390/joitmc8040205>.
- De Larrea, G. L., Altin, M., Koseoglu, M. A., & Okumus, F. (2021). An integrative systematic review of innovation research in hospitality and tourism. *Tourism Management Perspectives*, 37, 100789, <https://doi.org/10.1016/j.tmp.2021.100789>.
- Den Hertog, P., Van der Aa, W., & De Jong, M. W. (2010). Capabilities for managing service innovation: Towards a conceptual framework. *Journal of Service Management*, 21(4), 490–514, <https://doi.org/10.1108/09564231011066123>.
- Donate, M. J., de Pablo, J. D. S. (2015). The role of knowledge-oriented leadership in knowledge management practices and innovation. *Journal of Business Research*, 68(2), 360–370, <https://doi.org/10.1016/j.jbusres.2014.06.022>.
- Ebersberger, B., Herstad, S. J., & Nordli, A. (2021). Hospitality innovation strategies: Robustness analysis of paths to firm performance. *Tourism Management*, 85, 104310, <https://doi.org/10.1016/j.tourman.2021.104310>.
- Evangelista, R., & Vezzani, A. (2010). The economic impact of technological and organizational innovations. A firm-level analysis. *Research Policy*, 39(10), 1253–1263. <https://doi.org/10.1016/j.respol.2010.08.004>.
- Gambardella, A., & McGahan, A. M. (2010). Business-model innovation: General purpose technologies and their implications for industry structure. *Long Range Planning*, 43(2–3), 262–271. <https://doi.org/10.1016/j.lrp.2009.07.009>.
- Garcia-Alvarez, M. T. (2015). Analysis of the effects of ICTs in knowledge management and innovation: The case of Zara Group. *Computers in Human Behavior*, 51, 994–1002, <https://doi.org/10.1016/j.chb.2014.10.007>.
- Gizzi, M. C. & Rädiker, S. (Ed.) (2021). *The Practice of Qualitative Data Analysis Research Examples Using MAXQDA*. Berlin: MAXQDA Press.
- Gomezelj, D. O. (2016). A systematic review of research on innovation in hospitality and tourism. *International*

- Journal of Contemporary Hospitality Management, 28(3), 516–558. <https://doi.org/10.1108/IJCHM-10-2014-0510>.
- González-González, T., & García-Almeida, D. J. (2021). Frontline employee-driven innovation through suggestions in hospitality firms: The role of the employee's creativity, knowledge, and motivation. *International Journal of Hospitality Management*, 94, 102877, <https://doi.org/10.1016/j.ijhm.2021.102877>.
- Hassanien, A., Dale, C. (Eds.) (2013). *Facilities Management and Development for Tourism, Hospitality and Events*. Cabi, Wallingford.
- Hjalager, A. M. (2010). A review of innovation research in tourism. *Tourism Management*, 31(1), 1–12. <https://doi.org/10.1016/j.tourman.2009.08.012>.
- Hu, M. L. M., Horng, J. S., & Sun, Y. H. C. (2009). Hospitality teams: Knowledge sharing and service innovation performance. *Tourism management*, 30(1), 41-50, <https://doi.org/10.1016/j.tourman.2008.04.009>.
- Jiménez-Zarco, A. I., González-González, I., Martínez-Ruíz, M. P., & Izquierdo-Yusta, A. (2015). New service innovation success: Analyzing the influence of performance indicator nature. *Computers in Human Behavior*, 51, 1024–1031, <https://doi.org/10.1016/j.chb.2014.09.046>.
- Kallmuenzer, A. (2018), Exploring drivers of innovation in hospitality family firms, *International Journal of Contemporary Hospitality Management*, 30(3), 1978-1995. <https://doi.org/10.1108/IJCHM-04-2017-0242>.
- Karlsson, C., & Tavassoli, S. (2016). Innovation strategies of firms: What strategies and why? *The Journal of Technology Transfer*, 41, 1483–1506. <https://doi.org/10.1007/s10961-015-9453-4>.
- Kim, T. T., & Lee, G. (2013). Hospitality employee knowledge-sharing behaviours in the relationship between goal orientations and innovative work behaviour. *International Journal of Hospitality Management*, 34, 324–337, <https://doi.org/10.1016/j.ijhm.2013.04.009>.
- Kim, J. J., Radic, A., Chua, B. L., Koo, B., & Han, H. (2022). Digital currency and payment innovation in the hospitality and tourism industry. *International Journal of Hospitality Management*, 107, 103314, <https://doi.org/10.1016/j.ijhm.2022.103314>.
- Lehtinen, U., & Järvinen, R. (2015). The role of service characteristics in service innovations. *Nordic Journal of Business*, 64(3), 168-181.
- Lim, S. E., & Ok, C. M. (2021). Fostering absorptive capacity and facilitating innovation in hospitality organizations through empowering leadership, *International Journal of Hospitality Management*, 94, 102780, <https://doi.org/10.1016/j.ijhm.2020.102780>.
- Lin, L. (2013). The impact of service innovation on firm performance. *Service Industries Journal*, 33(15-16), 1599–1632. <https://doi.org/10.1080/02642069.2011.638712>.
- Line, N. D., & Runyan, R. C. (2012). Hospitality marketing research: Recent trends and future directions. *International Journal of Hospitality Management*, 31(2), 477–488. <https://doi.org/10.1016/j.ijhm.2011.07.006>.
- Luu, T. T. (2019). Can diversity climate shape service innovative behaviour in Vietnamese and Brazilian tour companies? The role of work passion. *Tourism Management*, 72, 326–339,

- <https://doi.org/10.1016/j.tourman.2018.12.011>.
- Martin-Rios, C., & Ciobanu, T. (2019). Hospitality innovation strategies: An analysis of success factors and challenges. *Tourism Management*, 70, 218-229, <https://doi.org/10.1016/j.tourman.2018.08.018>.
- Martin-Rios, C., & Parga-Dans, E. (2016). The early bird gets the worm, but the second mouse gets the cheese: Non-technological innovation in creative industries. *Creativity and Innovation Management*, 25, 6–17. <https://doi.org/10.1111/caim.12131>.
- Martin-Rios, C., & Pasamar, S. (2018). Service innovation in times of economic crisis: The strategic adaptation activities of the top EU service firms. *R & D Management*, 48(2), 195–209. <https://doi.org/10.1111/radm.12276>.
- Martínez-Ros, E., & Orfila-Sintes, F. (2012). Training plans, manager's characteristics and innovation in the accommodation industry. *International Journal of Hospitality Management*, 31(3), 686–694. <https://doi.org/10.1016/j.ijhm.2011.09.004>.
- McGrath, R. G. (2008). Connecting HR with Competitive Advantage. *Harvard Business Review* (June 30). <https://hbr.org/2008/06/connecting-hr-with-competitive>. [Date of Access: 16.06.2023]
- McLeod, M.T., Vaughan, D.R., Edwards, J. (2010). Knowledge networks in the tourism sector of the Bournemouth, Poole, and Christchurch conurbation: preliminary analysis. *The Service Industries Journal*, 30 (10), 1651–1667, <https://doi.org/10.1080/02642060903580664>.
- Oslo Manual (2005). https://read.oecd-ilibrary.org/science-and-technology/proposed-guidelines-for-collecting-and-interpreting-technological-innovation-data_9789264192263-en#page1. [Date of Access: 07.06.2023].
- Nicolau, J., & Santa-Maria, M. (2013). The effect of innovation on hotel market value. *International Journal of Hospitality Management*, 32, 71–79. <https://doi.org/10.1016/j.ijhm.2012.04.005>.
- Pikkemaat, B., & Peters, M., (2006). Towards the measurement of innovation - a pilot study in the small and medium sized tourism industry. *Journal of Quality Assurance in Hospitality & Tourism*. 6(3-4), 89–112. https://doi.org/10.1300/J162v06n03_06.
- Raub, S. P., & Martin-Rios, C. (2019). “Think sustainable, act local”—a stakeholder-filter-model for translating SDGs into sustainability initiatives with local impact. *International Journal of Contemporary Hospitality Management*, 31(6), 2428-2447.
- Rogers, E. M. (1983). *Diffusion of innovations*. The Free Press: New York.
- Scaglione, M., Schegg, R., & Murphy, J. (2009). Website adoption and sales performance in Valais' hospitality industry. *Technovation*, 29(9), 625–631. <https://doi.org/10.1016/j.technovation.2009.05.011>.
- Shamim, S., Yang, Y., Zia, N. U., & Shah, M. H. (2021). Big data management capabilities in the hospitality sector: Service innovation and customer generated online quality ratings. *Computers in Human Behavior*, 121, 106777, <https://doi.org/10.1016/j.chb.2021.106777>.
- Shin, H., & Perdue, R. R. (2022). Hospitality and tourism service innovation: A bibliometric review and future research agenda. *International Journal of Hospitality Management*, 102, 103176, <https://doi.org/10.1016/j.ijhm.2022.103176>.

- Styvén, M. E., Näppä, A., Mariani, M., & Nataraajan, R. (2022). Employee perceptions of employers' creativity and innovation: Implications for employer attractiveness and branding in tourism and hospitality. *Journal of Business Research*, 141, 290-298, <https://doi.org/10.1016/j.jbusres.2021.12.038>.
- Tajeddini, K., Trueman, M., (2012). Managing Swiss Hospitality: how cultural antecedents of innovation and customer-oriented value systems can influence performance in the hotel industry. *International Journal of Hospitality Management*, 31(4), 1119–1129. <https://doi.org/10.1016/j.ijhm.2012.01.009>.
- Thomas, R., & Wood, E., (2014). Innovation in tourism: Re-conceptualising and measuring the absorptive capacity of the hotel sector. *Tourism Management*. 45, 39–48. <https://doi.org/10.1016/j.tourman.2014.03.012>.
- Tavassoli, S., & Karlsson, C. (2016). Innovation strategies and firm performance: Simple or complex strategies? *Economics of Innovation and New Technology*, 25(7), 631–650. <https://doi.org/10.1080/10438599.2015.1108109>.
- Tracey, J. B., & Way, S. A. (2011). Making the most of your human capital. In M. C. Sturman, J. B. Corgel, & R. Verma (Eds.). *The cornell school of hotel administration on hospitality: Cutting edge thinking and practice* (pp. 444–554). New York, NY: Wiley.
- Uygur, A., Öğretmenoğlu, M. & Çalışkan, G. (2019). Innovation and New Product Development: Delving into Food and Beverage Managers' Perspectives. *Journal of Tourism and Gastronomy Studies*, 7 (4), 2993-3013, <https://doi.org/10.21325/jotags.2019.512>.
- White, M., & Marsh, E. (2006). Content Analysis: A Flexible Methodology. *Library Trends*, 55(1), 22-45.
- Yang, J. T. (2004). Job-related knowledge sharing: comparative case studies. *Journal of Knowledge Management*. 8 (3), 118–126, <https://doi.org/10.1108/13673270410541088>.
- Yang, M., Luu, T. T., & Qian, D. X. (2021). Linking transformational leadership to team service innovation in the hospitality industry: A team-level mediation and moderation investigation. *Journal of Hospitality and Tourism Management*, 49, 558-569, <https://doi.org/10.1016/j.jhtm.2021.11.011>.
- Yang, J. T., & Wan, C. S. (2004). Advancing organizational effectiveness and knowledge management implementation. *Tourism Management*, 25(5), 593-601, <https://doi.org/10.1016/j.tourman.2003.08.002>.
- Zhou, J., Shalley, C.E., (2003). Research on employee creativity: a critical review and directions for future research. In: Martocchio, J. (Ed.), *Research in Personnel and Human Resources Management*. JAI Press, Greenwich, CT, pp. 165–217, [https://doi.org/10.1016/S0742-7301\(03\)22004-1](https://doi.org/10.1016/S0742-7301(03)22004-1).
- Zopiatis, A., & Theocharous, A. L. (2018). PRAXIS: The determining element of innovation behavior in the hospitality industry. *Journal of Hospitality and Tourism Management*, 35, 9-16, <https://doi.org/10.1016/j.jhtm.2017.12.004>.