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Rohit Verma Strategic viability–fit model

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Developing a strategic viability-fit model of mobile technology adoption in hotels

Strategic
viability-fit
model

Hyunjeong “Spring” Han

Graduate School of Management, Kyoto University, Kyoto, Japan

Jungwoo Lee

Graduate School of Information, Yonsei University, Seoul, Republic of Korea

Bo Edvardsson

Karlstad University, Karlstad, Sweden, and

Rohit Verma

Vin University, Hanoi, Viet Nam

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Abstract

Purpose – Notwithstanding the expected apparent benefits of mobile technologies (MTs) in the hotel industry, their adoption is slower than forecasted. This study aims to identify the challenges faced by hotel managers in adopting MTs in their industry, such that the authors may determine the strategic positions for adopting and managing MTs and build a frame of reference for hotel management practices.

Design/methodology/approach – The authors conducted a series of focus group interviews (FGIs) with the managers and executives of luxury hotels. FGIs were conducted in groups in a semi-structured format, asking questions about MT adoption in their hotels and the challenges they faced. The FGI transcripts were analyzed using a grounded theory approach.

Findings – Open and axial coding of FGI scripts revealed 15 underlying categories of challenges in adopting MTs in hotels. Subsequent selective coding revealed two underlying dimensions: viability-fit. With these two underlying dimensions, a strategic model for MT adoption is developed. This model identifies four MT adoption strategies in hotels: lookers, experimenters, explorers and leaders.

Originality/value – The model developed and presented herein may help analyze a hotel's strategic positioning in adopting MT's. Depending on the positional analysis results, hotel managers can appropriately decide resource mobilization priorities and deployment timing.

Keywords Mobile technologies, Hotels, Strategy, Hospitality, Technology, Adoption, Focus group interview, Viability, Fit

Paper type Research paper

摘要

开发一项酒店移动科技应用的战略可行性模型

研究目的 – 尽管酒店中的移动技术 (MT) 具有预期的明显行业优势, 它们的采用速度比预期的要慢。本研究旨在确定酒店经理在其行业中采用 MT 时面临的问题和挑战, 以便我们可以确定采用和管理 MT 的战略位置, 并为酒店管理实践建立参考框架。

研究设计/方法/途径: – 作者与管理人和豪华酒店的高管进行了一系列焦点小组访谈 (FGI)。FGI 以半结构化的形式分组进行, 询问关于他们酒店采用 MT 的问题以及他们面临的挑战。FGI 的文字记录使用扎根理论方法进行分析。



研究发现：– FGI 脚本的开放和轴向编码揭示了 15 个潜在挑战类别酒店的 MT。随后的选择性编码揭示了两个潜在的维度：可行性，匹配度。有了这两个基本维度，就可以开发出采用 MT 的战略模型。这模型确定了酒店中的四种 MT 采用策略：观察者、实验者、探索者和领导者。

研究原创性/价值：– 这里开发和展示的模型可以帮助分析酒店在采用 MT 的战略定位采用。根据定位分析结果，酒店经理可以适当地决定资源调动优先事项和部署时间。

关键词：移动技术 – 酒店；战略；热情好客；科技；采用；焦点小组访谈；可行性；匹配度

文章类型 – 行业文章，研究论文，注重实践的论文

1. Introduction

Service firms are making efforts to adopt mobile technology (MT), anticipating opportunities to increase value co-creation with customers using MTs (Heidenreich and Handrich, 2015). Hotels also invite guests to use smartphones and tablet apps before, during and after service encounters for convenience and personalization of experiences (Dieck *et al.*, 2017). For instance, a hotel chain offers instant messaging services, thus extending concierge services; guests can exchange messages with staff using messengers on various platforms (Harkison, 2018). The messaging service enables hotel staff to respond more promptly in a personalized manner (Coussement and Teague, 2013). New socially interactive technologies foster a shift in how consumers interact with companies, from passive service recipients to connected co-creators in a technology-enabled experience environment (Sarmah *et al.*, 2017). These technologies can also be beneficial for the differently abled (Liu and Liu, 2011).

Notwithstanding these anticipated advantages, the adoption of MTs in the hospitality industry is slower than expected (Law *et al.*, 2018). Understanding why can expedite their adoption to reap their benefits (Harkison, 2018). There seems to be a paucity of understanding of the use of MTs in hotels (Navio-Marco *et al.*, 2019; Lee, 2018). Comprehending the use of MTs for individualized communication in a service context would be beneficial across different levels and classes of hotels (Kim *et al.*, 2014).

This study explores the challenges involved in adopting MTs in the hotel industry. A series of focus group interviews (FGIs) are conducted with hotel managers and executives to reveal the issues in adopting MTs. These, if found, can be the basis for building decision guidelines. Luxury hotels are selected as the context because empirical studies are rarely conducted thereof, and they have relatively affluent resources to consider experimenting with newer technologies. However, the findings will also apply to other types of hotels, albeit economically, by reflecting on the results of the resourceful experiments conducted by luxury hotels.

This paper is organized as follows: the literature review is presented in Section 2, including specific research questions. Thereafter, the research methods are described, followed by analysis and findings in Section 3. Next, Sections 4 and 5 discussions are made leading to the viability-fit model for MT adoption in the hotel industry, including practical and academic implications, followed by the research limitations of this study and future study opportunities in Section 6.

2. Literature review: mobile technology in hotels

Adopting MT in service management demands new perspectives on several dimensions as it changes service businesses in a way that differs from other technologies (Kim *et al.*, 2014). MT is not merely another platform that expands customers' contact points (Feijóo *et al.*, 2009). Simply perceiving MT as transferring existing content into mobile devices is an underestimation of its promising aspects (Lee, 2018). MT enables different interactions, distinct from interactions by fixed computers or face-to-face situations (Law *et al.*, 2019). It frees customers and staff from physical and mental constraints (Cavusoglu, 2019). This

means that MT services need to be conceived as something beyond physical or personal computer-based services.

These present new strategic and operational opportunities for service firms (De Reuver and Haaker, 2009). Efforts have been made to categorize different MTs in terms of their characteristics, such as mobile versus wired networks, wired internet and fixed devices (Eriksson, 2014; Hyun *et al.*, 2009). Additionally, it has been established that the softer side of MT enables new types of user experiences, as evident in applications, including organizing workflow on the move (Levi-Bliech *et al.*, 2018). MT can entertain users' complaints in real-time (Frasquet *et al.*, 2019) and enhance guest experiences promptly (Kim *et al.*, 2017). The soft side of MT represents a hotbed for the continuous conceptualization of innovative solutions (Barrett *et al.*, 2015; Gerstheimer and Lupp, 2004).

Smartphone applications have begun to attract attention in marketing and managerial studies, including brand communication research (Bellman *et al.*, 2011; Edelman, 2010), augmenting consumer experiences (McLean *et al.*, 2018), fashion retail marketing (Magrath and McCormick, 2013), customer service (Leon, 2018) and complaint channels (Frasquet *et al.*, 2019). Dube and Helkkula (2015) examine customers' use experiences in a smartphone application context, and the results show that indirect mobile use experiences are crucial in the holistic customer experience. However, the role of MT in a hospitality service ecosystem context still needs to be explored, as its full potential remains unrealized. Notwithstanding the short history of MTs compared to others, the anticipated benefits are high. MT can also be an excellent tool to help the differently abled in hotels (Liu and Liu, 2011).

To identify the studies on the challenges involved in adopting MT in the hotel industry, a keyword search is conducted on the Academic Search Complete database using the keyword set "(mobile technology, mobile devices, cell phones, or tablets) + (hotel)." Academic Search Complete is the most popularly used database in the academic domain for general purposes. It contains only journal articles, while Scopus contains conference proceedings. As this literature review aims to identify the established trends in MT adoption studies in the hotel industry, complete journal articles are more adequate than research in progress reported in conferences. Thus, Academic Search Complete is seemingly a good fit for our search.

The initial search produces a list of 114 academic journal articles containing papers related to MT and technological development, such as sentiment classification framework for reviews on mobile devices (Afzaal *et al.*, 2019) or agent-based recommendation of tourists (Batet *et al.*, 2012). Few articles deal with the challenges involved in adopting MT in the hotel industry. After screening out irrelevant articles, 12 articles that directly addressed business-related challenges in adopting MT in hotels were identified. During the review process of this article, four more articles were identified with anonymous reviewers' help. Thus, 16 articles are reviewed in Table 1.

Studies on the challenges faced by managers and executives in adopting MT in hotels are still incipient. Only one article deals directly with firm-level issues using a technology-organization framework (Wang *et al.*, 2016b). They report that compatibility, firm size, technology competence and critical mass are positively related to the adoption of mobile hotel reservation systems. They do not deal directly with identifying the challenges involved in adopting MT but indirectly with firm-level constructs. Two articles on the list study hotel managers' and employees' perceptions of MT (Kim *et al.*, 2014; Jeong *et al.*, 2016). Kim *et al.* (2014) conducted an empirical survey of 70 hotel managers using an instrument based on technology adoption and innovation diffusion theories. They find that perceived enjoyment and relative advantages are significant determinants of hotel managers' intentions to use MT. Jeong *et al.* (2016) use social cognitive theory to determine the critical

Table 1.
Studies on challenges
in adopting mobile
technology in hotels

Reference/methods	Theory/focus	Constructs/findings	Domain	Journal
(Wong <i>et al.</i> , 2020) Mixed methods	Usability and functionality assessment	47 attributes and seven dimensions for mobile website assessment	Hotel mobile websites	<i>IJHTA</i>
(Kim <i>et al.</i> , 2020) Quantitative	Experiential values	Service experience, esthetic value, playfulness and satisfaction	Hotel app experience	<i>JQAHT</i>
(Zhang <i>et al.</i> , 2019) Quantitative	The extended technology acceptance model	Different motives for mobile use: fun for leisure travelers and reliability and privacy for business travelers	Hotel-provided mobile technology	<i>JHMM</i>
(Lei <i>et al.</i> , 2019) Qualitative	Service-dominant logic, technology affordance theory and cognitive mapping	Interpretation of personal experiences are different between hoteliers and guests	Branded hotel mobile app use	<i>JHTM</i>
(Lee and Lee, 2019) Quantitative	Use and gratification theory	Cognitive, social, hedonic customer engagement, brand trust and brand loyalty	Branded hotel app use	<i>JQAHT</i>
(Huang <i>et al.</i> , 2019) Quantitative	Extended technology acceptance model with the experience construct	Ease of use and usefulness are essential in forming user experience	Mobile hotel app use	<i>JHMM</i>
(Law <i>et al.</i> , 2018) Qualitative	Literature review	More studies require supplier side	Mobile technology use in hotel and tourism	<i>JHMM</i>
(Park and Tussyadiah, 2017) Quantitative	Theory of perceived risk	Personal information protection, innovativeness, trust and visibility contribute to perceived risk	Mobile travel booking	<i>JTR</i>
(Liang <i>et al.</i> , 2017) Qualitative	Systematic review	Three topic clusters were identified: industry applications, innovations and consumer demands	Mobile tourism	<i>JTTM</i>
(Kim <i>et al.</i> , 2017) Quantitative	Extended technology acceptance model	Effort's expectancy, performance expectancy, social influence, technology anxiety and perceived credibility are critical	Hotel tablet app	<i>IJHTA</i>
(Im and Hancer, 2017) Quantitative	Expanded technology acceptance model	Image and personal innovativeness are critical in shaping guest attitudes	Travel mobile app	<i>JHMM</i>
(Wang <i>et al.</i> , 2016b) Quantitative	Technology-organization-environment framework	Compatibility, firm size, technology competence and critical mass are critical	The mobile hotel reservation system	<i>TM</i>
(Wang <i>et al.</i> , 2016a) Qualitative	Content analysis of online user reviews	Agency apps are designed for information services, while hotel apps for social networking and loyalty	Comparing functions in two types of hotel reservation apps: travel agencies very hotel brands	<i>JHMM</i>
(Morosan and DeFranco, 2016) Quantitative	Service dominant logic	Mobile habit influences value co-creation behavior leading to higher intention to stay	Co-creation of value by guests in hotels using mobile technology	<i>IJHM</i>

(continued)

Reference/methods	Theory/focus	Constructs/findings	Domain	Journal
(Jeong <i>et al.</i> , 2016) Quantitative	Social cognitive theory	Job relevance and self-efficacy of mobile technology influences job performance	Luxury hotel workers perception of mobile devices	<i>IJHM</i>
(Kim <i>et al.</i> , 2014) Quantitative	Technology adoption model and innovation diffusion theory	Relative advantage and enjoyment are important for adoption	Property managers' use of mobile technology at work	<i>IJHTA</i>

Notes: *IJHTA* (*International Journal of Hospitality and Tourism Administration*), *JQAHT* (*Journal of Quality Assurance in Hospitality and Tourism*), *JHMM* (*Journal of Hospitality Marketing and Management*), *JHTM* (*Journal of Hospitality and Tourism Management*), *JTR* (*Journal of Travel Research*), *JTTM* (*Journal of Travel and Tourism Marketing*), *TM* (*Tourism Management*) and *IJHM* (*International Journal of Hospitality Management*)

Table 1.

factors *vis-à-vis* adopting MT. Both cover the personal level adoption of MT in hotels, while we are interested in the challenges faced by management in adopting MT.

This list contains two review articles: [Law et al. \(2018\)](#) review MT usage studies in hotels and tourism and find that most are related to consumers dealing with mobile experiences. They demand more studies on supplier-side issues. Their suggestion is consistent with this study's objectives – the industry's challenges. [Liang et al. \(2017\)](#) also analyze online reviews of tourism and hospitality published in academic journals between 2002 and 2015. This review focuses on the consumer side, confirming the need for supplier-side studies related to MT challenges.

The 11 remaining articles study customers' perceptions of MT, including want ([Kim et al., 2017](#)), mobile website evaluation ([Wong et al., 2020](#)), technology acceptance model of mobile apps ([Huang et al., 2019](#)), attitude toward mobile apps ([Im and Hancer, 2017](#)), online reviews on smartphones ([Wang et al., 2016a](#)), motives for use ([Zhang et al., 2019](#)), satisfaction and reuse intention of mobile booking ([Kim et al., 2020](#)), brand loyalty ([Kim et al., 2020](#)), risks involved ([Park and Tussyadiah, 2017](#)), value co-creation ([Morosan and DeFranco, 2016](#)) and technology affordances ([Lei et al., 2019](#)).

Thus, this study fills the research gap by identifying the challenges faced by hotel managers in adopting MT. Two distinct but interrelated research questions for this study are

RQ1. What are the challenges faced by hotel managers in adopting and using MT?

RQ2. What are the underlying dimensions within these perceived challenges?

These underlying dimensions may affect strategic decisions related to MT adoption.

3. Research method

This study uses a grounded theory approach along with data collection through a series of FGIs, whereby facilitators bring a handful of people together in a room to discuss and provide interactive feedback regarding a product, service or concept ([Doody et al., 2013](#)); FGIs replicate real-world settings wherein people share their opinions by talking about their thoughts, feelings, perceptions and views within a group ([Palmer et al., 2010](#)). Underlying feelings and thoughts are better revealed during this process than in one-on-one interviews, where people become introverted and protective ([Fiates et al., 2008](#)); thus, consistent with the objectives of this study, executives and managers may talk more freely when engaging and triggering each other's mentation.

Luxury hotel managers, who lead technological changes in the industry, are selected as the FGI participants. Luxury hotels contain the most complex configurations of services in the hospitality sector, possessing high-touch and high-tech. Compared to mid-range hotels, top-scale properties compete more based on creativity and innovation than on price and location ([Harkison, 2018](#); [Wu and Gao, 2019](#)). Luxury hotels are generally considered as a highly complex ecosystem wherein customers experience and evaluate multiple services based on multiple criteria ([Verma et al., 2002](#)). Luxury hotels seek to offer the most remarkable personalized experiences, and their guests typically allow little room for error. Given the variety of customer expectations and services in luxury hospitality offerings, innovation activities are at the forefront in determining the "best" configuration of services to appeal to target markets in the hospitality industry ([Haugland et al., 2007](#)). Thus, the findings are applicable to other hotel types, albeit economically.

The International Luxury Hotel Association (ILHA) offers opportunities to conduct a series of FGIs in their major events in hospitality centers across the US. Although a single

industry in a nation may limit generality of the findings, it reduces potential problems that might arise when sampling firms from diverse industries (Han *et al.*, 1998; Kyriakopoulos and Moorman, 2004; Ordanini and Parasuraman, 2011).

Two researchers have conducted and facilitated a series of FGIs in several ILHA events in 12 major cities across multiple states in the USA. These FGIs are conducted throughout 2018, and 187 top managerial executives participate in the sessions. Each group's size ranges from approximately 9 to 16, depending on the size and scope of the event. In most cases, FGIs are scheduled as informal sessions after formal workshops or panel discussions. To promote free-floating discussions and issue-raising, personal information was not collected.

As most executives are involved in other sessions and remote business operations, they can come and go freely, even during the FGI sessions. Thus, number of participants could not be counted and are not reported here; participant demographics are also overlooked. In some cases, observers are allowed as audiences. The FGIs last approximately more than 1 h, depending on the number of participants and context of the event. The participants are executives and managers. At the beginning of each FGI session, the researcher, as the facilitator, briefs the participants about the session's goal. At the end of the initial briefing, the facilitator asks, "What are the challenges involved in the business use of MTs in their hotel operations?" All the participants are allowed to talk freely, and the facilitator mainly observes and listens while sometimes intervening with clarifying questions. Their discussions offer valuable insights into the challenges involved in adopting MT in luxury hotel context. Each FGI is recorded and transcribed. We conduct a grounded theory approach to analyze these transcripts (Strauss and Corbin, 1994). The grounded theory approach is appropriate for this study as our aim is to unravel the underlying dimensions, which may lead to a guiding theory concerning MT adoption.

4. Data analysis

The total page count of the FGI transcripts is 129 in double-space typesetting. Open, axial and selective coding are steps in the grounded theory approach for analyzing qualitative data (Scott, 2004). Using this approach, we expect to derive new data-based theories and concepts (Strauss and Corbin, 1994). Thus, these transcripts were coded step-by-step. The first step was open coding. Two researchers performed open coding separately, generating a list of statements containing references to specific challenges in adopting MTs in their businesses. In general, every sentence is coded in open coding, except for meaningless sentences, such as announcing breaks and salutary protocols. Compound statements are divided into single sentences, while tautologies and protocol-type statements are removed. Consequently, each researcher produced approximately 1,200 single statements. With a third researcher's aid, the list was refined into 336 statements describing the challenges involved. During this refinement process, duplicates were removed and similar statements were combined.

Subsequently, a fourth researcher was recruited and invited for axial coding. The first and second researchers involved in open coding did not participate in the axial coding. The third and fourth researchers reviewed the results of open coding and conducted axial coding of these 336 statements. Statements were combined, subdivided and eliminated while looking for repeated ideas and significant categories that accommodated similar ideas. The axial coding developed 15 meaningful categories of challenges, as shown in the first column of Table 2. The second column of Table 2 contains the sample statements in each category from open coding. The first and second researchers served as observers and answered only the clarification questions about open coding. However, once the axial coding was

Categories	Sample statements
<i>(Economic, technologic and organizational) Viability (with hotel business)</i>	
Vendor sustainability	Frequent technology handovers among tech vendors Competing technologies among vendors Technology ownership changes Issues of tech companies that are neither end-user-centric nor user-oriented but supplier-oriented Finding and selecting an appropriate technology developer
Maintaining content and design	Selection of contents to be used in a mobile environment Maintaining updated information and design of apps The appealing design of contents
Affordability	It takes a long time to get a return on investment Technologies are expensive to manage Budgetary cycle problems Escalating commitment problems
Real use	Technologically easy to use Staff members' lack of motivation Ease of usability for guests
Reliability	Language issues: multiple mobile plus multiple webs Infrastructural flexibility Accommodation of different technologies Availability of flexible technological platform Technology failure Consistent and continuous operations Fast response to failure
Connectivity	Average connectivity and internet accessibility Slow connection speed Access to technology and operational speed Constant connectivity of 24 × 7
Stability	Fast speed of update and feedbacks Keeping the technology up to date Constant revision and upgrade Frequent changes in process routines
Protectability	Privacy protection Protecting the guest information from misuse and abuse Mistakes made by technology providers Unmet requirements and unforeseen requirements Continuous changes in the related operational basis
<i>(Technological) Fit (with hotel service operations)</i>	
Convertibility	Translating traditional hospitality offerings into concise mobile applications Lack of integration between platforms Compatibility and integration with the business operations and organizations
Accountability	Managers losing control of the business processes Tracking responsibility for technological problems Data and process ownership problems
Service specificity	Detached responses inherent in digital communications Lack of personalized service and interaction with guests Missing personal interactions with guests Losing the real human touch in the hospitality business
Effectiveness	Aligning technology with organizational goals The contribution of technology to strategy is not clear Hesitant executives

Table 2.
Categories and larger
themes

(continued)

Strategic
viability-fit
model

Categories	Sample statements
Staff training	Time and efforts for training the staff Hotel trained staff's resistance to technology Learning how to use apps and how to maximize their utilization Newly training staffs with a different type of competences
Guest orientation	Guests not adept at technologies High-end clients with a technological aide Unwillingness to adopt technologies Guests' willingness to use apps
Transformational capabilities	Simplifying the business operation Resources needed for constant process changes Constant monitoring of all messages and related information New information handling competencies New types of service protocols in electronic-based services

Table 2.

completed, the first and second researchers assessed the results separately. The results were compared with the coding conducted by the third and fourth researchers. The differences between both groups were resolved by follow-up discussions.

For the final selective coding, four researchers carefully reviewed the 15 categories with component statements. Theoretical sampling and continuous comparisons were conducted over three months. During this time, a series of FGIs among the four researchers were conducted almost weekly. This selective coding process is central to the grounded theory approach design of this study. When necessary, external professionals were invited to provide coding-related advice. After this deliberation process of selective coding and theoretical revision based on renewed theoretical sampling, two higher-level dimensions emerged as the overarching frame: *viability-fit*. The executives and managers interviewed were primarily concerned about MT's economic, technological and organizational viability, as well as its technical fit with their service operations. They were unsure about the cost and benefit involved and sustaining affordability (viability). Meanwhile, they were concerned about the operational dimensions of their services using MT (fit).

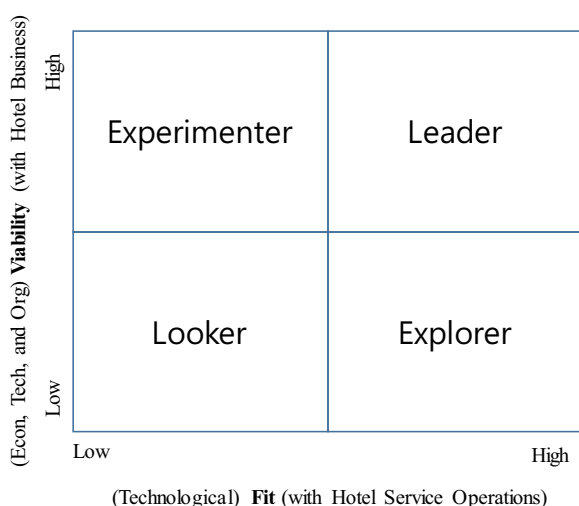


Figure 1.
Strategic viability-fit
model of mobile
technology adoption
in hotels

The logic behind this selective coding is explained hereinafter a brief explanation of the 15 categories identified. The first eight dimensions in [Table 2](#) address the organizational and economic viability of MT in hotel business operations. These are concerns about the financial and organizational costs and benefits accrued when MT is adopted. The remaining seven dimensions at the bottom of [Table 2](#) address the technological fitness of MT with hotels' business operations.

5. Strategic viability-fit model for mobile technology adoption

The two overarching dimensions of challenges involved in MT adoption in the hotel industry can be used as a basis for building a strategic grid-type decision-making reference frame. The introduction and adoption of MT in hotels require executives and managers' strategic decision-making to allocate resources at the appropriate time: viability and fit. The viability-fit of MT is related to the strategic deployment of resources across the organization. Managers need to strategically consider developing and maintaining revised business operations ([Koskela-Huotari et al., 2016](#)) within the firm's institutional arrangements.

A viability-fit model is constructed and presented in [Figure 1](#). The combination of different levels of these dimensions can be used to identify and analyze the positions of specific hotels for MT adoption. This two-by-two matrix represents a hotel's strategic position about the MT adoption. This model is named as a strategic viability-fit model for MT adoption in the hotel industry.

The *Y*-axis shows the viability of MTs regarding a hotel's operations, while the *X*-axis shows how MTs fit with the hotel operations. A good fit indicates that the hotel operation will benefit from MT without serious but minimal adoption efforts. With the viability scale on the *Y*-axis, a hotel manager can appraise the strategic viability of MT for a specific hotel, including the effectiveness of new business processes and the convertibility of exiting business processes. Good viability represents possible future benefits.

As part of the selective coding process, the four quadrants of this strategic viability-fit model are collaboratively labeled, reflecting the characteristics of each quadrant. This viability-fit model's four quadrants are labeled from bottom left to top right as a looker, explorer, experimenter and leader in MT adoption.

When MTs are assessed as having low viability and low fit in a specific hotel, the hotel's strategic position is the looker. As it lacks sufficient resources and its operations are not a good fit, it would not take any significant action at this time. However, it needs to monitor the technological development and competitors' MT adoption as the situation may change in the near future. Lookers need to observe changes in fit and viability from technological advances to environmental changes. Lookers can forecast their future MT adoption directions into an explorer or experimenter path, depending on their assessment of environmental, organizational and technological changes in the future.

Next quadrant with high viability but low fit is named as experimenter. Experimenters adopt MT on an experimentation basis due to the low fit. They assess MT as not a good fit for their hotels, but they found it viable for their operations. They need to assess the reason for low fit. Is it because of the not-well-designed business processes or is there any other reason? They experiment with MT, continuously testing the fit with the organization and operations. They may try to change the operations or the organizational cultures and processes. When they find a good fit with these trials, they can strategically become MT adoption leaders in the industry.

The explorer path can be strategically chosen by hotels that regard themselves as a good fit with MT but with low viability. In these hotels, their organizational processes and

competencies can be easily fitted with MT, but economic and organizational viability might be weak at this point. That is, they are waiting for resources to be freed to launch MT projects, and while doing that, they need to stay abreast of technological developments. Once the viability is obtained by way of business reengineering or environmental changes, they can move to a leader's position in the industry regarding MT adoption, possibly achieving strategic advantages. High viability-fit is a characteristic of leaders. They have sufficient resources, routines, cultures and orientations in terms of adopting MT's. They can set examples for the industry.

The leader quadrant is in some sense an ideal position of any hotel to achieve in terms of MT adoption. Leaders of MT adoption are with high viability and high fit. Viability is high meaning, that they can secure enough resources and competences to adopt and use MT on a full scale, and fit is high in terms of business processes, competences and culture in adopting MT effectively and efficiently.

6. Discussions and conclusions

This study develops a strategic viability-fit model for a hotel in an MT adoption context. Given the proliferation of smartphones and mobile devices, we argue that hotels will continue to extend their MTs to support managers, employees and customers. The adoption of MT entails various management issues for decision-makers, as they struggle to keep up with newly emerging MT. In this context, our study reveals numerous challenges and opportunities to successfully adopt and implement MTs to achieve effectiveness in hotel operations.

6.1 Conclusions

This strategic viability-fit model developed and presented here summarizes the managerial challenges involved in MT adoption in the hotel industry. It shows how a hotel makes strategic investments in adopting and using MT. As a strategic framework, this grid can be used as a thinking and analyzing tool that hotel managers and executives can use in assessing their current and continuing hotel-related MT needs on a project-by-project basis or from the whole of the enterprise perspective. The need for MT in the hotel business has been recognized for some time now but not so much adopted. It is more critical to daily operations than hitherto in nearly every types and classes of hotels. By understanding the strategic viability-fit model, hotel management can be directly involved in the strategic planning and management of MT in hotel operations. Consequently, operationalizing the strategic viability-fit model is a crucial part of hotel management in assessing MT adoption. This grid can be used to prioritize MT investments by putting the proposed actions into a clear framework that forces hotel managers to assess how vital MT projects are to the current and future operations of their hotel business on a project-by-project basis.

6.2 Theoretical implications

This two-dimensional model with strategic viability and fit with four quadrants would be helpful in considering a hotel's MT adoption and deployment strategy. This model illustrates the relationship between MT strategy and business operations in hotel industry. This strategic viability fit model of MT adoption contributes to the theoretical and scholarly understanding of a practice-driven technology adoption. The four different but closely related archetypes of MT adoption – looker, experimenter, explorer and leader – make up a theoretical proposition in classifying the managerial actions and decisions with regard to the MT adoption. Also, this theory of viability and fit for in hospitality can be extended as a project assessment framework. More case studies may extend and expand this theoretical

framework by constructing a more comprehensive and evidence supported theoretical framework. This framework will also be useful in terms of teaching and educating scholars in this area.

6.3 Practical implications

As for practice, this framework will help decision-making process in MT adoption. The hotel industry considers MT adoption as an opportunity more than a threat, despite the challenges that may hinder the immediate adoption. However, as MT enables access to resources and collaboration with other actors in the co-creating value process in more efficient and effective ways with possible positive influence on customer experiences and company success. Here, the biggest challenge in using these technologies is to make strategically timely decisions without losing human touch for individualized services and face-to-face interactions. The viability-fit framework proposed here can be used in these decisions to maximize favorable customer experiences, assess and maintain the strategic positions related to MT utilization in hotels and other hospitality-based businesses.

6.4 Limitations and future research

However, this study is based on loosely conducted FGIs with qualitative analysis using the grounded theory approach. Actual management practices may not have been revealed from the verbosity during FGIs. Our qualitative data are solely based on verbal interactions among the participants in a series of FGIs. In future studies, more in-depth investigations of actual management practices through one-on-one interviews or close observations of decision-making sessions seem necessary to augment and support the results herein. The proposed strategic viability-fit model also requires empirical validation by in-depth case studies in actual practice. Further empirical research is needed to explore the feasible paths among lookers, experimenters, explorers and hotel industry leaders in MT practices.

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Corresponding author

Jungwoo Lee can be contacted at: jlee@yonsei.ac.kr

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