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Shaping Success for Mobile Applications of Integrated Resorts

Krista Larsen
University of Nevada, Las Vegas

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SHAPING SUCCESS FOR MOBILE APPLICATIONS

OF INTEGRATED RESORTS

by

Krista Larsen

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Abstract

As smartphones have become indispensable in society, it has become critical for integrated resorts to develop mobile applications ("apps") that serve as a marketing tool and an enhancement in the customer's travel journey. This research reviews the features of existing mobile travel apps, in addition to areas of opportunity for future innovations regarding this platform. Based on this research, this study recommends best practices for an integrated resort's mobile app. The findings of this study can be leveraged as a resource when developing and maintaining mobile apps within the hospitality industry to provide an optimal guest experience throughout the entire trip journey.

Keywords: Digital transformation, integrated resorts, metaverse, mobile application, share of wallet, user-generated content

Acknowledgements

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Chapter One

Introduction

The digital transformation, especially in the form of smartphones, has had a profound

impact on modern society. There are more than 270 million smartphone users in the United

States (O'Dea, 2021). As cellular phones have evolved into smartphones, consumers are reliant

on these devices now more than ever. Smartphones have significantly grown in popularity within

the past decade. Mobile phones are embraced as an indispensable form of technology. While

there is usually an initial resistance to new forms of technologies, smartphones and mobile

applications ("apps") are both commonly utilized and respected in society. Smartphone

technology is rapidly and continuously changing (Mo Kwon et al., 2013).

The hospitality industry can offer conveniences by leveraging mobile apps on

smartphones as a travel companion (Global Data, 2021). Most individuals, or 72%, take at least

three leisure vacations per year on average (Statista, 2019). This presents an opportunity for the

hospitality industry to capture and engage more of this population via technological

advancements. "Guest-oriented technological conveniences" is a recurring trend for the

hospitality industry (Ristova & Dimitrov, 2019). Since the 1970s, the hospitality industry has

adopted various forms of technology that have altered consumer behavior, with the goal of guest

satisfaction. Individuals have become accustomed to conveniences brought upon from

technological advancements in the travel journey. The travel booking process has transformed

from booking a hotel reservation over the phone, to online, and now through a mobile app on a

smartphone (Ristova & Dimitrov, 2019).

The intersection between the hospitality industry and evolving consumer needs is

imperative to success in a digitalized world. The hospitality industry is encouraged to be "high-

tech" and "high-touch" to cater to everchanging consumer demands. Integrated resorts must hone innovative experiences to flourish amid a competitive landscape. Consumers have a significant amount of power in the hospitality industry, so it is wise for integrated resorts to develop strategic competitive advantages (Ristova & Dimitrov, 2019).

Further, the COVID-19 pandemic has emphasized the need for touchless and contactless customer service experiences. By implementing self-sufficient abilities on mobile apps, the hospitality industry can prioritize health and hygiene to ease consumer sentiment, while also providing conveniences (Cal, 2020). The hospitality industry can implement mobile apps to enrich contactless experiences.

In addition to the desire for contactless experiences, consumers are also fond of personalized communications. Most consumers understand the tradeoff between giving their valuable personal data to companies for bespoke recommendations. Consumers want to be treated as individuals and receive promotional offers that are specifically tailored to them (EHL Insights, 2021). An optimized mobile app should enhance the customer's journey across the travel consumption phases for a fully curated experience (Gibbs et al., 2016).

Benefits

There are several benefits for integrated resorts to implement mobile apps. As the number of global smartphone users increases, mobile applications can be leveraged to reduce companies' marketing costs, increase access to customer data, and reach out to potential customers (Mo Kwon et al., 2013). Guests who maintain a hotel's mobile app on their phones are more likely to repeatedly visit the hotel, in addition to providing the hotel with more of their personal information in return for a personalized experience (Escobar, 2017). As consumers become more involved with a mobile app, this can result in brand loyalty (Huang et al., 2019).

Mobile apps can function as a communication channel between the resort and their guests (Mo Kwon et al., 2013). Mobile apps acquire relevant data to build relationships with customers and serve up personalized recommendations. Through this data, mobile apps can be a channel for communicating with consumers without flooding them with unimportant information, such as email or direct mail avenues (Teter, 2018). One-to-one personalized offer strategies can lead to a competitive advantage while addressing consumer needs. Certain mobile app features, such as mobile check-in and keyless entry, are not only a convenience to guests, but can also result in labor cost reduction (Ristova & Dimitrov, 2019). Most importantly, the conveniences offered by a seamlessly integrated resort mobile app can increase guest satisfaction (Global Data, 2021).

Concerns

While there are undoubtedly benefits to an integrated resort implementing a mobile app, there are a few concerns. Executing and maintaining a mobile app can be costly. The operator must decide between internally managing through an in-house technology team or through a third-party (Global Data, 2021).

Consumers are increasingly wary of the brands they let into their lives, which can hinder adoption. However, adoption is vital for a mobile app's success. Further, a mobile app must have a value proposition for guests to download and use it (Gros, 2021). As an individual participates in an increasing number of interactions with a resort's app, these interactions will become more personalized and immersive. This can result in the user obtaining value from this level of engagement (Morosan & DeFranco, 2016).

While initial app adoption is one barrier, continued app engagement is another hurdle. Research has indicated that most consumers are willing to download travel mobile apps, however roughly 50% subsequently delete them after a trip (Tian et al., 2021). An integrated resort can

overcome this obstacle with a couple methods. When guests see others using their smartphones as a tool at the front desk or wagering at slot machines or table games, adoption can transpire (Gros, 2021). Additionally, the resort can force certain behaviors through the app, such as mobile check-in and keyless entry. Further, integrated resorts can limit the availability of certain promotional features to be only valid through the app, such as in-app discounts and bonuses.

Privacy is an additional concern for consumers to be wary of with utilizing an integrated resort's mobile app. The disclosure of personal information is required for personalized communications. According to the personalization-privacy paradox, there is a delicate balance between a company's need for personalized customer data and a consumer's need for privacy. To aid in privacy concerns, companies can be forthright about the purposes of obtaining personal information and allow individuals the ability to revoke some of their disclosed data (Morosan & DeFranco, 2016).

Purpose of the Study

The purpose of this study is to determine best practices for designing a successful integrated resort mobile app. This set of standards can be referenced as a guide for the hospitality industry. Thus, there is one main research objective:

RO. What are the best practices for features of mobile applications for integrated resorts?

Existing research recognizes the importance of mobile apps in the hospitality industry, however existing research is currently limited to best practices of travel mobile apps but does not apply that knowledge to integrated resorts in the hospitality industry. This study will aim to synthesize the best practices of travel mobile apps and leverage these findings to integrated resorts in the hospitality industry. This study can prompt future research, as technology adapts to consumer needs and innovations are developed.

Conceptual Framework

To determine the best practices for mobile apps for integrated resorts, this study will encompass a review of literature ranging from several topics. First, the review will identify the characteristics and features of today's existing travel mobile apps. This research will also assess future opportunities that have yet to be tapped in the hospitality industry's mobile apps. Last, this study will provide recommendations of the most optimal features of an integrated resort's mobile app.

Problem Statement

Companies in the hospitality industry, especially integrated resorts, must meet and exceed consumer demands for contactless and touchless technological advancements. While it is imperative for integrated resorts to deliver unique experiences and high-quality service, travel consumers are seeking self-sufficient technologies in a seamless experience. This represents the need for the hospitality industry to continuously innovate their products and services to appeal to existing and new customers. The development of a mobile app with optimal features can aid integrated resorts in engaging and attracting their clientele (Ristova & Dimitrov, 2019).

Limitations

Limited Research

There are limited studies regarding smartphones and mobile apps for integrated resorts in the hospitality industry. This research will apply best practices from the broader hospitality industry, as needed.

Delimitations

Integrated Resorts

This research is specific to recommendations for mobile apps of integrated resorts, which are expansive properties that feature, but are not limited to, both a large-scale hotel and a casino on-property (MacDonald & Eadington, 2008). While findings will be gleaned from the broader hospitality industry without casinos, the findings will be conclusive for properties with both hotels and casinos on premises, as some features and subsequent recommendations are associated to establishments with casinos.

Loyalty Programs

The integration of loyalty programs in an integrated resort's mobile aps is wise for brand loyalty and customer retention (Teter, 2018). While an integrated resort's mobile app is often incorporated with the company's loyalty rewards program, this study will not include research on the best practices of a loyalty rewards program, nor loyalty program credit cards, as these are substantial subject matters and could function as unilateral research paper topics.

Definition of Terms

This study references the following terms to support its research objectives:

Digital transformation, or *Digitalization: "*Changes associated with the application of digital technology in all aspects of human society" (Ristova & Dimitrov, 2019).

Integrated Resorts: Large scale entertainment-focused resorts, including amenities such as a casino, convention hall, spa (MacDonald & Eadington, 2008).

Metaverse: "A virtual space within digital environments such as online games, social media, and virtual reality" (Berry, 2021).

Mobile Application: "Most commonly referred to as an app, is a type of application software designed to run on a mobile device, such as a smartphone or tablet computer" (Techopedia, 2020).

Share of wallet: "How much of a customer's expenses for a category of product or service goes to a particular company" (Smith, 2017).

User-generated content: "Users of social media can share travel-related information, stories and experiences uploading text contents, images, audios, and videos without any special technical skills as well as their travel-related comments, opinions, reviews and ratings, and recommendations" (Kang & Schuett, 2013).

Chapter Two

Introduction

Smartphones and mobile apps have become indispensable in people's everyday lives (Tian et al., 2021). The proliferation of mobile devices represents a significant opportunity for integrated resorts to develop mobile apps that cater to consumer demands (Chen et al., 2016). As mobile devices have grown in popularity over the past decade, they are both marketing tools for resort operators and travel companions for consumers (Global Data, 2021). Further, mobile travel apps are increasingly becoming an effective method for communication between companies and customers (Tian et al., 2021). As more integrated resorts implement mobile travel apps, it will be imperative for resorts to remain competitive and innovative with this technology.

Consumers who are savvy with smartphones are most likely to download mobile apps for hospitality companies (Mo Kwon et al., 2013). Integrated resorts can embrace this technological revolution by offering mobile apps that allow the consumer to easily browse, make reservations, and communicate with the resort in one accessible location. This allows for mobile travel apps to function as a convenient tool for guests.

This study's objective is to serve as a reference guide for best practices of mobile app features for integrated resorts. This research will identify current features of mobile travel apps, then define optimal standards for an integrated resort's mobile app. While significant research has been conducted on best practices for mobile app features for the hotel industry, there is limited academic research on the application of these findings to integrated resorts with casinos.

As technology in the hospitality industry is constantly evolving, peer-reviewed journal articles and recently published articles will be referenced for the most up-to-date research. This literature review is conducted in a topical fashion in general-to-specific order, also known as the

funnel approach. This research will identify current practices of existing mobile apps, in addition to future technological advancements that are on the precipice of inception.

<div align="center">**Trends of Smartphone Users and their Impact on the Hospitality Industry**</div>

Smartphones have a large imprint on society. There are more than six billion smartphone users worldwide, while 270 million smartphone users reside in the United States (O'Dea, 2021). There are impacts on the hospitality industry as the number of smartphone users in the nation increases. Many smartphone users, or 60%, have downloaded travel mobile apps with the intent to use them for the travel decision-making process (Kennedy-Eden & Gretzel, 2012).

Further, individuals are no longer tethered to desktops for travel planning. The number of travel sales conducted on smartphones has increased from 40% to 60% in recent years (eMarketer, 2017). Consumers are now perpetually connected to their mobile devices, allowing for more onus in travel planning (Coussement & Teague, 2013). This shift in consumer behavior from booking travel reservations via phone or desktop to mobile devices signifies the importance of an optimized integrated resort's mobile app.

Next, there are major societal shifts toward contactless and cashless options (Bontempo, 2021). Health and hygiene have become priorities in travel due to the COVID-19 pandemic, leading to heightened demand for swift innovations with touchless technology (Global Data, 2021). Prior to the COVID-19 pandemic, cashless and contactless technologies were viewed as an opportunity to cater to evolving consumer demands. However, these technologies are now considered a necessity for safety, survival, and restoring confidence in travel (Bontempo, 2021). Further, the COVID-19 pandemic has also perpetuated the likelihood of consumers downloading and using hotel mobile apps (Amadeus, 2021).

Value Creation in Mobile App Guest Experiences

Research has indicated that an optimal customer experience is vital to an integrated resort's mobile app. As with the intangibility of the service-based hospitality industry, the success of travel mobile apps is also dependent upon positive guest experiences. An individual's perception of a mobile app's utility is critical to adoption (Morosan & DeFranco, 2016).

The Technology Acceptance Model indicates an individual's intention to use and accept a form of technology by its perceived usefulness and ease of use (Agrebi & Jallais, 2015). Individuals are more likely to download mobile apps that are useful and perceived as easy to use (Mo Kwon et al., 2013). Further, a higher perceived usefulness and ease of use of a mobile app can result in an increased likelihood of a purchase behavior.

While the perceived usefulness of an app is important, the value in the user experience within an app is more likely to influence purchase intentions (Kim & Law, 2015). Individuals prefer both informative and enjoyable experiences while utilizing mobile apps (Huang et al., 2019). Consumers have a higher propensity of accepting mobile apps with pleasing aesthetics (Huang et al., 2019). Individuals find using a mobile app enjoyable because it is accessible on a mobile device anytime and anywhere (Agrebi & Jallais, 2015).

Attributes of Existing Travel Mobile Apps

Given the unprecedented growth of mobile technology, the hospitality industry has started to embrace mobile apps. Mobile apps can provide guests with readily available information before, during, and after phases of travel (Chen et al., 2016). Features of travel mobile apps can seamlessly integrate with the guest experience in mind (Global Data, 2021).

There is a taxonomy of eleven categories for travel mobile apps, related to the services that these apps provide to users. These categories include concierge, real-time and not real-time

information delivery, lifestyle enhancement, social sharing, loyalty and special offers, external transactions, internal transactions, context aware and non-context aware navigation, and property-specific technology tools. This study leverages this classification in the context of the features of existing travel mobile apps (Gibbs et al., 2016).

Personal Concierge Services

Personal concierge services within a travel mobile app enable guests to facilitate special requests without the immediate need for a hotel representative (Gibbs et al., 2016). Some of today's travel mobile apps have a chatbot feature that provides functional assistance across any step of the customer's journey. Chatbots can increase engagement and optimize the guest's experience through a personalized approach. For example, a guest's preferences can be saved to the user's profile and remembered for future interactions and visits. The chatbot can assist with booking reservations or answering simple questions, without the need for a human resource (Gonçalves, 2016).

With a real-time virtual concierge messaging service such as a chatbot, guests can communicate to various departments at the resort for towels, room service, maintenance requests, or even issuing complaints. As an example, the Cosmopolitan implemented a chatbot concierge service "Rose", where guests can personalize their specific requests prior to arrival, then Rose will respond and deliver upon these requests in a playful and efficient manner. Rose can also provide recommendations to specific outlets at the resort to ensure a significant portion of the guest's share of wallet is remaining on property (Ristova & Dimitrov, 2019). The personal concierge feature can be viewed as a competitive advantage, as the resort has ownership of the guest experience while they are on property (Chen et al., 2016).

Real-Time Information Delivery

Information delivery presented to guests in real-time through mobile apps help consumers stay engaged with the resort via push notifications (Gibbs et al., 2016). These notifications are delivered to guests like a text message and are considered more powerful than e-mail marketing. These notifications can either be promotional or informational in nature (Global Data, 2021). However, a hindrance to this form of communication is that guests can opt out at any time (Teter, 2018). This type of information can include hotel bill information and weather updates.

Once a trip has been reserved, push notifications can serve as trip reminders and allow for cross-sell and up-sell opportunities when itinerary planning (Global Data, 2021). Additionally, this form of communication delivery can provide a direct line of communication in the event of a service issue and allow for prompt service recovery. Konami Synkros features a communications system for guests and resorts to interact in real-time and at any time (Gros, 2021).

Not Real-Time Information Delivery

Unlike real-time information delivery, a feature category of mobile apps includes the delivery of information that does not change from a process or occurring event (Gibbs et al., 2016). Examples of this type of information include a hotel directory, virtual room tours, and general hotel information. When making reservations for services online, consumers solely rely on visual support to frame their decisions. For example, virtual room tours are interactive experiences that have a positive impact on purchasing intent (Bilgihan et al., 2015).

Informational features within a travel mobile app are one of the most important features to travelers. In fact, individuals believe the most significant feature of a travel mobile app is a resort's check-in and check-out information (Chen et al., 2016). Individuals often view mobile

apps as a source for information rather than for transactions (Wang et al., 2016; Chen et al., 2016). Further, individuals have favorable opinions of mobile travel apps that provide relevant information that allows for ease in decision making (Wang et al., 2016).

Lifestyle Enhancement Tools

Lifestyle enhancement tools are present in only a few existing travel mobile apps. These features are not specifically related to the resort but can benefit the traveler's mood. For example, music streaming options, such as Spotify, can be integrated within the app. A guest may be throwing a small party in his or her room and could link their music streaming app within the integrated resort's mobile app to play music throughout the room. Additionally, health and fitness programs, meditation tools, and sleep aids are also lifestyle enhancement tools featured within some of today's travel mobile apps (Gibbs et al., 2016). For example, a guest may have trouble sleeping and could access a meditation function within the resort's mobile app to relax.

Social Sharing Tools

Social sharing tools within travel mobile apps allow individuals the ability to share their travel experiences seamlessly (Gibbs et al., 2016). While most individuals desire to be connected to their social network, this is especially true while traveling and in the travel planning phase (Kim & Law, 2015). A mobile app can be integrated with the user's social media accounts to post about their experience at the resort in real-time (Ristova & Dimitrov, 2019).

When consumers post their own content for their travel experiences online, also known as user-generated content, it is sometimes met with skepticism among travel consumers online (Kang & Schuett, 2013). Consumers are less likely to accept user-generated content and online reviews because travel is a service-based industry where each experience is volatilely different. Consumers are more likely to accept word-of-mouth communications from friends and family

members. Thus, sharing travel experiences via personal social media accounts can be viewed as a promotional tool (Ayeh, 2015).

Although social sharing tools are present in a vast amount of hotel mobile apps, users are not too keen on this feature. Respondents in a study indicated that social media is the least important feature within a travel mobile app. Individuals are more likely to utilize the social media apps and features that they already have on their phones, rather than social media links within a travel app (Chen et al., 2016).

Loyalty and Special Offers

Loyalty and special offer features in travel mobile apps offer guests the ability to access loyalty account status and special promotions (Gibbs et al., 2016). Some individuals identify promotions as a key factor for downloading a resort's mobile app (Mo Kwon et al., 2013). Further, integrated resorts can offer unique in-app room rates to incentivize in-app behavior. An increasing majority of travelers, 80%, use an app while researching a trip, thus incentivizing this behavior with a discount can convert browsing into a reservation (Global Data, 2021).

Individuals are most likely to download mobile apps for hospitality companies, especially if there is promotional information on the app that is inaccessible in other locations (Mo Kwon et al., 2013). Specific in-app promotions can encourage interaction between guest and the resort's mobile app (Teter, 2018). The Konami Synkros system features a promotional game that is only available within the app. This system can also cohesively integrate a resort's loyalty rewards program within the mobile app (Gros, 2021).

Companies that track consumer behavior can create highly customized and targeted offers (Teter, 2018). Travelers prefer recommendations based on their personal preferences (Global Data, 2021). As guests continue to interact with a mobile app, integrated resorts can gain

an understanding of consumer behavior, which will allow for data-driven personalized marketing and offers. For example, companies can become familiar with the optimal time or phase in a guest's lifecycle that individuals are most likely to make a reservation or access the app, then the resort can provide timely offers based on these behaviors to incent a reservation (Teter, 2018).

Personalized communications to guests via mobile apps can result in cost savings for integrated resorts. Over $600 million was spent on physical promotional mailers in 2020 (Bontempo, 2021). In addition to its significant cost, this archaic form of communication is slow to arrive to guests. A promotion via a mobile app notification is delivered in real-time, which allows for a shortened amount of time between a guest's booking and arrival. Last, post-trip surveys can be deployed within the mobile app to acquire more personalized customer preferences. These surveys can feature a bounceback offer to encourage guests to book a return trip (Global Data, 2021).

External Transactions

External transactions on a travel mobile app offer guests the ability to purchase goods and services that are not physically located within the resort. For example, rideshare integration can be a convenience for guests. This feature could also be integrated with the resort's loyalty rewards program to earn points on rides through the specified rideshare partner. Additionally, a resort's mobile app can be integrated with a ticket provider for entertainment reservations (Gibbs et al., 2016). While it is wise for resorts to encourage that guests remain on property to capture the most share of wallet, resorts can offer conveniences within their mobile apps for a seamless transition.

Internal Transactions

Internal transactions within a resort's mobile app offer guests the ability to purchase goods and services at the property (Gibbs et al., 2016). Increased customer engagement within a mobile app is likely to result in a transaction (Tian et al., 2021). A seamless mobile app for an integrated resort can be a "one-stop-shop" for the customer's travel journey. For example, this allows consumers the ability to make reservations for any aspect of their trip in one location, along with supplemental amenities or services (Global Data, 2021). With this centralized reservation system, guests can place reservations for restaurants, entertainment, spa treatments, cabanas, or even pool chairs from the convenience of their mobile devices (Bontempo, 2021).

Booking a room reservation within a mobile app encourages purchase behavior and loyalty (Bilgihan et al. 2015). Those who have made a reservation through a mobile app are more likely to book within an app again, due to convenience and the ability to save preferences and payment methods (Global Data, 2021). Positive experiences in mobile bookings can also result in trust and brand equity. These factors can ultimately lead to long-term relationship building between the resort and the consumer (Bilgihan et al. 2015).

Additionally, digital wallets within mobile apps can facilitate monetary and gambling transactions at integrated resorts. IGT has introduced cashless technology entitled "Resort Wallet" that allows for guests at resorts to access their funds from various sources, such as credit cards, debit cards, bank accounts, and digital wallets. This technology allows for guests to withdraw funds via a convenient and touchless experience. With Resort Wallet, guests can even transfer funds between slot machines. This can also be integrated with the resort's loyalty program, so a guest is no longer required to carry a physical loyalty rewards card. Resort Wallet is also slated to be enabled for table games and retail outlets (CDC Gaming Reports, 2021). This

technology allows guests to bypass kiosks and ATMs to withdraw funds from their bank accounts that other individuals have touched.

Safety needs amid the COVID-19 pandemic fast-tracked casino and hotel operators to incorporate self-service technology with cashless and contactless innovations. Some operators have built digital wallet solutions for guests who no longer want to hold physical cash (Bontempo, 2021). Some individuals are willing to leverage their mobile devices as a form of payment, which has been amplified with the COVID-19 pandemic. An increasing majority of individuals 'somewhat' or 'strongly agree' that they will pay for items with mobile phones, as identified by 55% of respondents of a COVID-19 Recovery Survey by GlobalData (Global Data, 2021).

Similar to the capabilities of IGT's Resort Wallet, Resorts World Las Vegas leverages Konami Synkros. This system not only features a digital wallet, but also offers the ability to wager on both slots and table games from mobile devices. Gambling winnings can be transferred to the guest's cashless wallet rather than disbursed in cash, which is especially prudent if large winners do not want to physically carry a significant amount of cash in person (Gros, 2021). An incremental benefit of cashless gaming is saving time. With cashless and contactless technology such as a digital wallet, guests no longer need to wait in line at kiosks, the cage, or ATMs. This allows consumers more time for enjoyable activities at the resort, to have peace of mind, and ultimately the opportunity to spend more money (Bontempo, 2021).

Context Aware Navigation

Context aware navigation is a feature within travel mobile apps that provides navigational information through global positioning system (GPS) location technology (Gibbs et al., 2016). Integrated resorts can be behemoths in size, which make it nearly impossible for guests to

navigate through the property with ease. Mobile apps can feature real-time navigational maps and even assist with finding specific casino games on the floor (Bontempo, 2021). As an example, Lighthouse built an indoor GPS that can integrate with mobile apps to serve as an indoor navigation system for resorts in Las Vegas (Takahashi, 2013).

Further, GPS-based location information within a mobile app can personalize recommendations to specific outlets, attractions, and restaurants within their proximal vicinity (Tian et al., 2021). For example, a user looking for the resort's art gallery can utilize the context aware navigational features within the resort's mobile app to easily find it. Innovative technologies around ingress and egress will improve the guest experience and could result in profitable opportunities for the resort.

Non-Context Aware Navigation

Non-context aware navigation within travel mobile apps describes navigational information without the use of GPS technology (Gibbs et al., 2016). Navigation is considered one of the most important features of a travel mobile app. Further, individuals observe the most prominent navigational features as directions to the resort and transportation information (Chen et al., 2016).

Property-Specific Technology Tools

Last, property-specific technology tools in travel mobile apps are technological innovations that can enhance guest experience (Gibbs et al., 2016). For example, mobile check-in and keyless entry are features in a mobile app that allow for guests to bypass the standard process of checking in at a hotel's front desk. Sightline Payments developed a mobile app that can be fully integrated with a resort, from hotel check-in and check-out, mobile hotel key, room controls, cashless gaming, loyalty balances, and personalized offers (Bontempo, 2021). With this

feature, guests can utilize their smartphones in lieu of a physical hotel room key, via keyless

entry. Starwood Hotels was the first hotel to implement keyless entry technology in June 2014

and has since been leveraged across major hotel chains, including Hilton, Marriott, Hyatt, and

InterContinental Hotels Group (Ristova & Dimitrov, 2019). Hilton has seen 34 million digital

check-ins and more than 18 million doors opened since implementing mobile check-in and

digital key features in their mobile app, Hilton Honors (Escobar, 2017).

Further, some resort mobile apps have enabled guests the ability to control certain room

features. With this technology, guests can adjust the room's temperature, curtains, lighting, and

televisions from the convenience of their smartphones (Ristova & Dimitrov, 2019). For example,

Hilton Honors guests can manage certain in-room features through their app that previously

would require a manual touch. Further, guests can save their preferences for these features in the

mobile app, so it can be applicable to their stays across all tech-enabled Hilton resorts (Escobar,

2017). Thus, this allows for a personalized and curated experience on a guest's future visit.

An additional property-specific technology tool is mobile ordering. MGM Resorts

International's mobile app features mobile food and beverage ordering technology in lieu of the

traditional room service approach. This technology allows guests to order food and beverage

items from anywhere on property, including poolside, without interacting with staff. Guests can

scan a Quick Response code, or QR-code, to open a menu and order directly from their mobile

devices (Stapleton, 2021a). Not only does this serve as a convenience for guests, but it also

allows for employers to save on labor expenses related to food and beverage and room service.

In a similar vein, Resorts World Las Vegas was the first to launch a partnership with the

food delivery service Grubhub to allow for food and beverage delivery from the resort's vast

array of restaurants to guests anywhere on the premises from poolside to hotel rooms. If a guest

orders at the pool, the package is delivered to an air-conditioned locker area until the guest opens it by activating via a QR-code for a touchless and seamless experience (Stapleton, 2021b).

Future Implications for the Hospitality Industry

The aforementioned features leverage technological abilities of existing travel mobile apps. While current mobile apps have been created in an era of digital transformation, a virtual transformation is an impending trend that is expected to shape the future landscape. Further, the metaverse is an immersive world within digital landscapes that unites "virtual entertainment with the real-world economy" (Berry, 2021). For example, individuals can sightsee, attend events, own land and buildings, and shop for goods and services with virtual or physical currencies in the metaverse. Interacting with the metaverse has become popular amid the COVID-19 pandemic, as increasingly more individuals have an online presence (Berry, 2021).

The convergence of physical reality and virtual reality could have significant implications on the hospitality industry in the future. There are several opportunities that an integrated resort's mobile app can feature for relevance in a virtual world. First, an integrated resort's mobile app could offer consumers the opportunity to develop their own virtual hotels with the resort's branding within the metaverse. Alternatively, integrated resorts could build their own identities in the metaverse and interact with consumers in a unique manner to promote brand awareness. Within these experiences, resorts could host virtual events, early access to virtual opportunities, exclusive discounts to physical experiences, or giveaways for digital goods. Further, the mobile app can utilize virtual reality tourism to showcase 360-degree tours of physical properties or even virtual properties (Pinas, 2021). In an evolving virtual climate, the opportunities are endless.

Ultimately, the metaverse is a chance for integrated resorts to uniquely connect with consumers. This can translate into an immersive experience where individuals can engage with brands in a more exciting way. This content is appealing to the younger Gen Z demographic, so it is imperative for integrated resorts to ensure that responsible gaming is promoted. This virtual transformation will certainly influence the needs for an integrated resort's mobile app.

Conclusion

The hospitality industry relies on satisfactory guest experiences. Providing an optimal guest experience is central in the development and optimization of an integrated resort's mobile app. Travelers are increasingly connected to technology, as mobile phones and laptops are paramount to our everyday lives (Global Data, 2021). The COVID-19 pandemic has expedited the need for contactless and innovative technologies in the hospitality industry (Global Data, 2021).

A robust mobile app with self-sufficient technologies enables guests to enjoy more of their time on vacation. This aggravates the need for resorts to gather guest data and provide these guests with a personalized experience on their next visit. Further, as the physical world converges with the virtual world, an integrated resort's mobile app can leverage opportunities for relevance in the metaverse.

While a positive guest experience is key to the success of the hospitality industry, a seamlessly integrated mobile app can further improve the guest experience. A plethora of existing travel mobile app features have been identified within the framework of a taxonomy (Gibbs et al., 2016). Based on these characteristics of existing hotel mobile apps, this paper will next provide recommendations for best practices of an integrated resort's mobile app.

Chapter Three

Introduction

It is evident that mobile apps can be both marketing tools for integrated resorts and travel companions for consumers. While some integrated resorts have already implemented mobile apps, this research signifies that certain mobile app features hold more value to consumers than other features. The purpose of this study is to determine best practices for designing a successful integrated resort mobile application. This set of standards can be referenced as a framework for the hospitality industry. Thus, there is one main research objective:

RO. What are the best practices for features of mobile applications for integrated resorts?

Summary of Literature Review

The literature review analyzed several trends that infer the importance of implementing optimized mobile apps at integrated resorts. First, smartphones have become vital in people's everyday lives. Further, the increasing number of travel sales conducted on smartphones justifies the need for integrated resorts to implement enhanced mobile apps for consumers. Last, the COVID-19 pandemic has expedited the hospitality industry to prioritize health and hygiene via contactless and cashless technologies.

Next, this literature review explored current feature categories and practices of existing travel mobile apps with the intention of designing a framework of ideal features for an integrated resort's mobile app. This research leveraged a taxonomy of eleven feature categories for travel mobile apps. These categories include concierge, real-time and not real-time information delivery, lifestyle enhancement, social sharing, loyalty and special offers, external transactions, internal transactions, context aware and non-context aware navigation, and property-specific technology tools.

The concierge feature within a mobile app allows guests to interact with the property, without physical human interaction. Real-time information delivery provides guests with up-to-date information immediately upon request such as a hotel bill, whereas not real-time information delivery provides information that does not vary with an occurrence. Lifestyle enhancement tools are not specific to the integrated resort but can enhance the guest's on-property experience.

Social sharing tools within a travel mobile app allow guests to post user-generated content about the resort in real-time. Next, loyalty and special offers can include loyalty account status and exclusive in-app promotions. External transactions allow guests to reserve goods and services that are not on-property, whereas internal transactions allow guests to purchase on-property goods and services.

Context aware navigation utilizes GPS technology to assist guests in navigating the resort, while non-context aware navigation provides static directions around the premises. Last, property-specific technology tools are innovations such as keyless entry, mobile check-in, and digital wallet that offers conveniences to guests.

Last, the literature review examined future implications that are not currently present in existing travel mobile apps. Integrated resorts can explore the unique opportunity of interacting with consumers in the metaverse. Resorts can offer virtual experiences through the metaverse and attempt to attract a younger clientele.

Research Question Review

The research question addresses the ideal attributes for an integrated resort's mobile app. This study leverages this classification of eleven feature categories to ultimately identify the most optimal features for an integrated resort's mobile app to possess.

Recommendations

Mobile apps should be seamlessly integrated with the guest experience. A resort's mobile app should solve for guest issues as a useful component of the guest's trip. This study can serve as a guide of best practices for mobile app features for integrated resorts. Since an optimal guest experience is key to the success of any integrated resort in the hospitality industry, implementing these features can result in an enhanced guest experience. Eleven feature categories of existing travel mobile apps have been identified. The following will review the most important feature categories that an integrated resort's mobile app should contain. Further, this research will also provide recommendations for specific app features within those categories.

Currently, consumers perceive mobile apps as a source of information rather than for transactions, so it is imperative for integrated resorts to prioritize informational features above all else. While rudimentary, guests believe the most significant informational feature of a travel mobile app is the hotel's check-in and check-out information. In addition, real-time information delivery features are critical to an integrated resort's mobile app's success. For example, the ability to quickly access accurate reservation information on-demand results in guest conveniences. An integrated resort's mobile app can deliver push notifications to guests prior to their arrival as a reminder of their upcoming reservations, while also potentially providing itinerary planning opportunities. These communications can suggest making a reservation for a restaurant that is distressed during a specific time and day of the week, for the restaurant to drive demand where it is truly needed. For example, a guest may have an upcoming room reservation within the next week and receives a push notification from the resort's app proposing a brunch reservation.

Further, guests perceive navigational features as one of the most significant features in a

travel mobile app. Location-based knowledge can enrich a guest's experience at the destination.

Individuals desire non-context aware navigational features such as resort directions from the

airport and provide options for transportation. A guest can utilize this feature within an

integrated resort's mobile app to determine the most efficient mode of transportation to get to the

property quickly and safely from the airport. While non-context aware navigation is not

considered to be a real-time feature, these features are important to guests in a travel mobile app.

Next, context aware navigation utilizes GPS technology to improve a guest's experience

while navigating throughout the property. Context aware navigation through GPS recognizes an

individual's location based on an opt-in feature on the user's mobile device. This form of

navigation can help assist the individual to circumnavigate the property in real-time. For

example, a guest who is already on the property and is looking for the spa could click on the spa

within the integrated resort's mobile app. Then, GPS-based navigational directions will assist the

guest to find the spa based on his or her proximal location. Further, the mobile app can ping the

guest with push notifications for establishments along the guest's journey. As the guest passes by

the resort's steakhouse, the app can deliver a push notification that recommends placing a dinner

reservation. This tactic could help ensure that a larger proportion of a guest's share of wallet

remains on property while they are on vacation.

While informational and navigational features of a mobile app are significant, some

consumers also recognize the importance of promotions when downloading a travel mobile app.

It is wise for this promotional information to be proprietary to the app to encourage individuals

to maintain and continuously use the app for deals and subsequently reservations. For example,

when a guest is browsing for a potential room stay and abandons his or her cart online, the

mobile app can deliver push notifications that remind them of their abandoned cart. This notification can feature a promotional discount to incentivize a reservation. Further, an integrated resort's mobile app can feature a promotional game that is only accessible within the app. For example, this game could award points or dining credits that increases with the number of visits per year. This feature can drive engagement with the app and repeat visitation for the resort.

Facilitating internal transactions in an integrated resort's mobile app can foster guest loyalty and engagement. Guests who make reservations through a resort's mobile app have a higher propensity of booking with the property again. Further, the digital wallet capability in mobile apps offer conveniences to guests that resorts should not overlook. With digital wallet, guests can easily access their personal finances from the ease of the integrated resort's mobile app for certain activities, such as gambling wagers and retail purchases. Further, a guest can use the digital wallet feature of an integrated resort's mobile app to transfer funds and place wagers while playing at slot machines or wagering at table games. This allows for conveniences for guests. Next, offering internal transactions within an integrated resort's mobile app can build brand loyalty and prevent guests from venturing outside of the property. For example, a guest has been playing a slot machine for a few hours and requests the cash-out voucher from the machine. When an integrated resort's mobile app is synchronized to the slot machine's activity, the mobile app can then promptly deliver the guest a dining discount via a push notification. This discount can feature a small expiration window to provide a sense of urgency for the guest to redeem the discount within a short period of time. This initiative helps nudge and motivate the guest to dine at the property and possibly continue playing at the property after the meal.

Further, personal concierge services in an app can allow guests to request certain goods or services without human interaction. Concierge services in the form of a chatbot can provide

personalized recommendations to guests. Guests can utilize the chatbot feature on an integrated resort's mobile app to request anything on-demand without the immediate need for a human interaction. For example, a guest in need of more towels in his or her room can communicate with the app's chatbot instead of calling an employee on the phone. This allows for conveniences for the guest, as the guest does not have to wait on hold until an employee is able to answer the phone. Additionally, a guest can place reservations within the concierge feature of the app. This could also provide upsell opportunities to the guest, which allows for incremental revenue streams for the resort. For example, a guest booking a facial at the spa through the app's chatbot service can be recommended a massage as well. Although in-app concierge is a convenience, guests prefer more informational and transactional features of an integrated resort's mobile app.

Next, property-specific technology tools are innovative features that complement a guest's experience. Integrated resorts can partner with certain companies, such as Sightline Payments, to implement mobile check-in and keyless entry that allow for guest conveniences. Guests can also save their in-room preferences for ease in their next return to the property. For example, a guest can select a desired room temperature within the integrated resort's mobile app, then this setting can be saved as a preference for future visits.

While there are several features that are recommended to prioritize in an integrated resort's mobile app, there are some features that are not integral to a mobile app's adoption. For example, it is not recommended for an integrated resort to prioritize solutions for external transactions within their mobile app. Allowing external transactions on mobile apps might offer some conveniences for guests, however it is not recommended to include this feature, as integrated resorts should focus on efforts that keep individuals on-property.

Consumers perceive social sharing tools as one of the least important features of an integrated resort's mobile app, so it is recommended to omit this feature. Individuals prefer word-of-mouth recommendations about travel from friends and family. However, individuals are often skeptical of travel recommendations online. Further, individuals are more apt to utilize the social media apps on their phones, rather than use social media links within a mobile travel app.

Lifestyle enhancement tools, such as integration with music streaming and meditation apps, are the least important features for an integrated resort's mobile app. Akin to social sharing tools, individuals are more likely to access the lifestyle-centric apps on their phones, rather than utilize a lifestyle enhancement tool within a travel mobile app. Thus, it is not recommended for integrated resorts to incorporate lifestyle enhancement tools into their mobile app.

Last, the metaverse provides a unique opportunity for integrated resorts to gain brand awareness. In this virtual landscape, integrated resorts can host experiences such as virtual events or giveaways for digital goods. While interacting with the metaverse is not presently a necessity for integrated resort mobile apps, it is wise to continuously monitor the appetite for this to reach a younger clientele and as a competitive advantage.

Implications and Conclusion

These findings will help integrated resorts develop and maintain mobile apps that cater to evolving consumer desires and demands. The identified best practices will help technology and marketing departments at integrated resorts leverage resources to the most significant elements of travel mobile apps. These features can also create efficient processes that reduce labor and marketing costs.

Limitations of Research

Research reviewed within this study are limited to items published within the past ten

years. As there are vast improvements and innovations with technology, especially regarding

smartphones and mobile apps, it is vital for this research to be most representative of the current

environment.

Recommendations for Future Research

Since mobile technologies are rapidly developing, future research would benefit from

asking the following questions:

1. Are there any new features of travel mobile apps that should be reviewed?

2. How has the metaverse influenced the transformation of travel mobile apps?

3. Is there a newer, more relevant taxonomy of travel mobile app features to consider?

4. How can desired features of travel mobile apps vary by certain consumer demographics,

   such as age and gender?

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