

IMPLEMENTATION OF GUEST-FACING TECHNOLOGIES IN HOSPITALITY BUSINESS

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The article deals with the guest-facing technologies that positively affect the overall hotel efficiency. Challenges, benefits, and keys to successful implementation of mobile applications for hotels were determined. It was found that this will improve the quality of hotel services and the competitiveness of hospitality industry enterprises.

Keywords: guest-facing technologies, innovative technologies, mobile applications, cloud-based systems.

Statement of the problem. Nowadays people's preferences about hospitality service are more sophisticated and wide. A modern technology in HORECA has become an important task of discussions in recent years because of many good consequences they can cause on the revenue and guests' expectations. To prepare for the future lodging companies must be ready to contend with a business environment characterized by growing commoditization, increased competition, and economic, geographic and demographic shifts. Today is the time for hoteliers to improve their technology strategies and take benefits of the impact that technological advances can make on the business. In modern environment every drop of advantage must be wrung from technology to get along with different challenges in hospitality industry.

Challenge № 1 – gather and use guest preferences and intelligence to provide delivery of superior customer experience. Hotels are uniquely able to gather data and profile through the many sources of interaction both on and off property. Informational technologies (IT) can enable the business in making this data available for greater customer intimacy and anticipation of returning guest needs.

Challenge № 2 – social media. Hotels have to implement and integrate new customer communication channels, notably social media and contact centers for optimal efficiency. The reputation of the hotel is created in the digital space by guests and reviewers.

Challenge № 3 – the demanding customer. Each guest demand, expectation and experience can be a make-or-break opinion, an opportunity to lose or win the repeat business that drives bottom-line performance. It is the matter of opinion how these problems are communications-based and if technology is leveraged to deliver.

Challenge № 4 – increasing revenue, lowering cost. It is important to identify additional revenue streams while make savings through operation efficiencies, for example, non-room revenue (spa, golf, banquet, conference rooms, restaurants). Technology must be used for optimizing staffing level and tools they need to use – including mobile electronic devices that are required to do their jobs. Hoteliers must use technology to streamline shift changes for maximum productivity and savings.

Analysis of recent researches and publications. More than 4 billion mobile phones are now smartphones, there are now 1,2 billion mobile web users worldwide. Today more than 50 percent of all

«local» searches are done from a mobile device. Mobility is penetrating in everything we do. The way people use mobile technologies is changing dramatically and actually customers leading the changes faster than hoteliers. Nowadays mobile technologies play accrual role in how people interact and buy. To find and buy what they want, today's digital consumers are better informed, super connected and fully engaged across all channels – from smartphone, PC, stores, social networking etc. Notably, anyone born since 1980 has enjoyed a life through association with real-time «instant» communications. These trends will be available as technology becomes more sophisticated.

One study found that 73% of guests in hotels leave and don't come back after one poor experience, and 85% of those also tell others about it – either physically or online or both [1]. On the other hand delighted guests spend 50% more in ancillary revenue than those who are just satisfied or indifferent. That is also 75% more than unhappy guests; plus – they tend to spend even more during repeat visits [2]. A returning guest only cost about 20% to sell again compared to a new guest [3].

Corresponding to the heightened guest expectations and increased hotel technology budgets, lodging companies invest approximately 4,9% of revenue in IT. The mid-scale chains are the biggest spenders by this metric, they spend 6,6% when compared to the 3,5% in the economy and luxury hotels.

Guest-facing technologies were the highest priority for the surveyed cohort of IT professionals. The other important areas of tech upgrades are adding bandwidth to on-property systems (especially as the industry trends towards personal content consumption), and preparing for the upcoming shift in North America to the chip-and-pin technology.

Technology has moved from only being a boost to behind-the-scenes activities to a guest-facing tool that positively affects the overall hotel experience. The rise of mobile payments also poses a technology quandary to hotels, as there are currently competing standards without a clear winner. The reality of multi-brand mobile payments is also that there will likely be several winners, and guests might wish to pay via a variety of mobile-first payment systems in the near future.

Migrating to the cloud continues to be a priority for many respondents. Services across the board are being transitioned from on-property to the cloud, including PMS (15% moving to cloud), sales and

catering (14%), POS (14%) and CRM (12%). The security of this data is obviously also a concern, with many hotel technologists seeing securing data as a clear priority. As the shift to cloud-based services continues, hotels must spend more money on security to prevent breaches or other embarrassing lapses. Mid-tier brands are the most likely this year to see an increased focus on security, investing 10.39% of budgets in security and PCI compliance. That's compared with only 6.87% last year. Security technologies currently being deployed, as identified by respondents, are: third-party security-as-a-service (43%), total end-to-end encryption (41%) tokenization at swipe (40%), and breach protection (27%).

Mobile is also a priority when it comes to employees. Given the near-ubiquity of smartphones, hotels can now also consider mobile solutions that address particular employee considerations on this mobile channel.

The purpose of the work. Guests expect to use mobile devices for interacting with products or services in modern ways; employees want to improve their productivity looking for mobile solutions. Hoteliers will need to use mobility holistically for determining ways of effective integration between both guests and employees demands into enterprise architecture and through the guest life cycle. Hotels are already making inroads with incorporating mobility at varying points across the guest life cycle. By now there is little doubt about the fact this concept will become a de facto standard in the industry. Indeed by 2020, 95% of guests believe hotels will increasingly look to new technologies to drastically increase efficiency, reduce costs, and improve service.

Formulation purposes of article (problem). The main purpose of the article is to analyse the perspectives of implementation of mobile technologies in the ordinary processes that take place in the hospitality industry (hotels and restaurants).

The main material of the research. Many hotel companies abroad have released mobile apps enabling users to search and explore hotels using location-based technology, and to book/modify their reservations. Mobile apps also offer loyalty account integration, property concierge and pre-arrival check-in services. A mobile user in New York City, for example, can receive a message to make a reservation at a hotel with location-specific offers. Separately, mobile phones are using smart technology to become multipurpose devices that can be used as digital keys to guest rooms.

Clever software solutions can ease booking processes and other technicalities the modern traveller has to deal with, while at the same time keeping him happy with well-timed and relevant messaging. Guest-oriented applications take the next step: they run on the guest's personal electronic device and allow him to more or less enter into the hotel's data flow. This has benefits for both sides: the guest can access hotel information and service offers anywhere and anytime, whereas the hotel registers the guest's actions and can immediately respond to his requests.

Many digital companies offer a complete suite of these custom-tailored solutions for communicating with guests. All modules are seamlessly inte-

grated both with each other as well as with the hotel's central management system. Manfred Osthues, managing partner of protel hotelsoftware GmbH, Dortmund, is convinced of the integrative power of the latest cloud technology: «By making clever use of the cloud modules, the information flows freely between hotels in the same chain, between the departments of a house, between individual employees and above all between hotel and guest. This way, basic data processing evolves into real communication. Under an ideal setting this creates an endless loop, a «Guest Journey» covers all phases of interaction with a guest» [3]. This research ensures that technologists have an equal place at the executive roundtable; especially given the outsize influence technology has on all aspects of the guest experience.

The most of Kyiv hotels use PMS «Opera Enterprise Solution», made by corporation Micros-Fidelio («Baccara», «Vozdvujenskyi», «Holosiivskyi», «Intercontinental», «Khreshchatyk», «Lybid», «National'nyi», «Opera», «Podil Plaza», «Riviera», «Rus», «Radisson Kyiv», «Slavutich», «Stara Vienna», «Hyatt Regency»).

Micro offers two basic point-of-sale systems, depending on the size of the restaurant – bigger one uses the Micros 3700. There are a lot of innovative companies that could integrate mobile solutions with ordinary property management system, but it is appropriate for hoteliers to take into the mind providing of cloud-based systems that will be good foundation for innovative products whenever they must be installed.

A brief example demonstrates how a hotel might enable more fluid interaction with guests and at the same time make effective use of opportunities for up-selling and cross-selling: the guest finds a positive review of the hotel on the internet and visits the hotel website. He reserves a room using the integrated WBE (Web Booking Engine), and, while he's about it, books a spa treatment, too. He receives his booking confirmation either via text message («short and sweet») or as an e-mail. Both contain a link to the hotel app that will provide him with information on the latest offers at the hotel even before he checks in. Check-in is taken care of via QR code or iPad – no queuing required. Room service can be ordered conveniently with his mobile phone. And using the questionnaire tool integrated into the hotel app he can speak his mind even before checking out. Should it be glowing praise or harsh criticism – the hotel manager will know right away and can react immediately.

The Self Service Portal works on the guests' mobile devices through Internet access – there is nothing to develop and nothing to be downloaded by the customer. The feature is offered as an add-on to the hotel management system functionality against a small flat monthly charge. Besides digital check-in/out and room selection, guests can benefit from other options: to fill in their registration cards and sign them digitally, to inform the hotel about reaching a nearby location and their soon arrival, to preview their bill, pay it online and check out by themselves, to request a change of their booking or order room service. The room choice option is personalized, which means that the guests is recognized by the system, greeted

personally and shown the rooms they have already stayed in before. And all this is available to each and every one of our guests.

As a starting point, IT Managers should consider the two common deployment scenarios of such applications: tablet in the room, owned and managed by the hotel, or a downloadable application accessible on the guests' own devices. Both options have shown merit: For instance, engagement on room-paired devices is typically higher, whereas BYOD lowers cost and allows guests to use the application outside the hotel or prior and after their stay.

The problems IT managers face in both scenarios are the connection of the applications to the hotel's internal systems, such as the Property Management System, Point of Sale or Room Control devices. Initially, it's critical to consider how the device connects to its backend server where content and other functionality of the application is managed, and whether this server sits in the cloud or on property.

For a tablet that is paired to the room, best practice includes using a dedicated, hidden, and password-protected SSID to connect to the network via Wi-Fi, contained to a trusted VLAN zone and separate from the guest network. This will ensure traffic, and hence an intruder cannot intercept data and commands. Secondly, IT Managers should ensure that their application vendors encrypt any traffic from the tablet to the back end server using SSL, which, should an intrusion occur, will not allow anyone with malicious intent to understand the commands being sent and repeat them for other rooms, for instance.

While these rules apply for both cloud and locally deployed back end servers for your hotel applications, IT Managers should keep in mind that typically the cloud based deployments come with a number of benefits in terms of maintenance and support. Nevertheless there are scenarios where local servers might be preferable, such as in geographic locations with poor Internet.

It is also good practice for any connection from the application on the device to a third party system in your hotel to run via the aforementioned central back end server, rather than allowing each device to directly connect to your business critical systems independently. This will ensure that a connection to the PMS for example can be easily secured, as it will be limited to one single line of communication between the PMS interface machine and the server running the backend services, to which the application connects to in order to receive data. Such a connection can be protected via VPN, IP-based restrictions and by using vendors who inherently secure their interface APIs via appropriate authentication methods.

BYOD brings additional complexity here as the devices connect to the backend server using the public Wi-Fi or 3G, rather than a network that can be controlled by the hotel. Here, additional measures to authenticate devices should be put in place, for example a guest can only control the lights if they have entered a PIN number that is shown on the TV and reset for every guest on check out.

The findings from this study. Practitioners looking after the implementation of an application for their hotel need to ensure that the chosen provider can supply appropriate data flow documentation that covers the above points. In addition, they should be able to illustrate their approach to security of the communication between tablet, application server and third party systems. Given the issues that have surfaced, this due diligence is essential when considering a vendor. Putting this into practice, a detailed RFI process involving all appropriate stakeholders of the property is essential and can ease the process of acquiring the information from vendors and subsequently drawing comparisons between shortlisted application providers. A dedicated effort through technology and service to achieve these positive touch-points will pay dividends in the end through increased customer loyalty and traffic.

References:

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ВПРОВАДЖЕННЯ ОРІЄНТОВАНИХ НА ГОСТЯ ТЕХНОЛОГІЙ В ІНДУСТРІЮ ГОСТИННОСТІ

Анотація

У статті розглянуто технології, орієнтовані на гостя, які дозволяють підвищити ефективність функціонування підприємства готельного господарства. Досліджено особливості розроблення і використання мобільних додатків та визначено переваги їхнього успішного впровадження для готельних підприємств. Встановлено, що це сприятиме підвищенню якості готельних послуг і конкурентоспроможності підприємств індустрії гостинності. Впровадження мобільних технологій дозволяє охопити всі етапи взаємодії з гостем.

Ключові слова: орієнтовані на гостя технології, інноваційні технології, мобільні додатки, хмарні системи.

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ВНЕДРЕНИЕ ОРИЕНТИРОВАННЫХ НА ГОСТЯ ТЕХНОЛОГИЙ В ИНДУСТРИЮ ГОСТЕПРИИМСТВА

Аннотация

В статье рассмотрены технологии, ориентированные на гостя, которые позволяют повысить эффективность функционирования предприятия гостиничного хозяйства. Исследованы особенности разработки и использования мобильных приложений и определены преимущества их успешного внедрения для отельных предприятий. Установлено, что это будет способствовать повышению качества гостиничных услуг и конкурентоспособности предприятий индустрии гостеприимства.

Ключевые слова: ориентированы на гостя технологии, инновационные технологии, мобильные приложения, облачные системы.