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# Methodology for Digitization of Companies in Hospitality and Tourism

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#### **Abstract**

The key to reaching and successfully courting and attracting the consumer, the tourist, is digitization. It is the means not only to find the potential customer, a tourist, but also to grab his attention, win him over and keep him as our loyal guest, a tourist over time. For this purpose, organizations in the field of tourism and hospitality need to be flexible and innovative regarding the information content they provide. In this sense, it is unacceptable for the hotel to have, for example, a static website or not to have possible ways of presenting information through the use of digital technologies, for example a virtual walk, which gives an initial idea and influences the tourists' perceptions by creating certain expectations.

This paper is aimed to present a methodology for digitization of the organization in the field of tourism and hospitality.

Keywords: digitalization, AI, hospitality, virtual reality, digital transformation

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### Introduction.

Every organization in the field of hospitality and tourism is affected by the legal regulations at the state level, as well as reflecting the specifics of the local hotel or restaurant business. The key to reaching and successfully courting and attracting the consumer, the tourist, is through digitization. It is the means not only to find the potential customer, a tourist, but also to grab his attention, to win him over as well as to keep him as our loyal guest, a tourist over time. For this purpose, organizations in the field of tourism and hospitality need to be flexible and innovative regarding the information content they provide. For this purpose, the digital maturity is defined as "business status, digital transformation" (Papadoupolus et al., 2021). Digital transformation in the hospitality industry is possible through the adoption of digital technologies and change in the current business models. The current paper presents digitization in the hospitality, affected by the digital maturity that organizations in this sector have. For this purpose, digitization in hospitality will be presented as methodology below.

### 1. Literature review.

The current methodology presents the steps that each organization from the hospitality and tourism goes through to reach the certain degree of digital maturity in accordance with its set goals. The goals of business presence define the goals of the organization's presence in the virtual space. It is about the specific results that the organization (hotel, restaurant, tourist site, cultural attraction) aims to achieve in its activity such as:

Step 1 Virtual presence and presentation of the organization to attract visitors to the website of the organization. On this step, the organization can choose to apply different level of

digitization varying from virtual presence in a website to more interactive form such as virtual reality tour.

Step 2 Digitization of the organization by the use of social media. The digital maturity of the organizations can be fulfilled by the use of mobile applications for social media marketing campaigns or by using mobile devices such as tablets, phones to attract visitors through (a mobile application assisting the visitor to book a room, make an inquiry to the hotel using a chatbot or other virtual advisor, using (QR) codes to scan the restaurant menu, brochure with additional services and excursions, remote access systems such as virtual TV access, contactless digital menu,

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dynamic personal pricing, (CRM) as well as artificial intelligence systems (Papadoupolus et al., 2021).

The business objectives of the organizations are related to the efficiency, which the organization strives to achieve:

- 1. If the organization aims to increase the visits of potential tourists, a specific measure of the efficiency of its activity are:
  - the number of visits;
- the number of inquiries from the tourist. In particular, through digitalization, the effectiveness of this stage of interaction with the user is measured by:
- number of visits to the website of the organization hotel, restaurant, cultural object, tourist attraction);
- Number of actions, taken by the user, expressed by likes, shares of the post on social media is a sign of engagement with an advertising form of communication (Yordanova, 2023). Engagement means how much the advertisement stimulates customers to take the specific action following the AIDA model, where A- attention, I-interest, D- desire, A-action. It refers to the extent on which the customer's interest is stimulated and how the user is motivated to move from simply viewing a page or post to take the specific action. If there is an engagement, it means that there is a positive reaction from users and they participate in the call to action or would like more content from the advertiser. Engagement is a sign and measure of the degree of response from the user to the relevant advertising campaign. The very fact that a given publication has likes is a criterion for available interest in the offered tourist product/service. Likes are a measure of interest (Usmani et al., 2019).

For example, in the social media Facebook, three possible behaviors are known to engage in Facebook communication; likes, comments and shares. Facebook has a built-in algorithm that gives weight to each proposed behavior from ch.t. their strategic importance (Usmani et al., 2019), and learns when each behavior can be stimulated by organizational messages. Findings show that sensory and visual features of messages stimulated as rational and interactive features of messages lead to comments, while sensory, visual and rational features of a message prompt the user to share content among Facebook users (Usmani et al., 2019). If there is engagement on the part of the consumer, it leads to the creation of brand value, acts as a strategic imperative, leads to building competitive advantage and ultimately improves business performance.

The customer engagement is a set of psychological processes combining emotional, cognitive and behavioral orientations of consumers (Usmani et al., 2019), and the process of customer engagement in an online environment consists of sharing, co-creating, socializing, learning and advocating online. These sub-processes increase customer satisfaction, build customer loyalty, empower them, create emotional connection with brands, and trust and commitment (Usmani et al., 2019).

In order to challenge the visitor and convert the customer to the next stage of interaction with the organization, various marketing tricks can be used such as:

- Sharing the page among friends. This tool is perceived positively, considering its unobtrusiveness. Undoubtedly, virtual communities in their role as a distinct social aggregation, uniting individuals with common needs, exchanging mutually useful information in a digital environment for the purpose of information seeking, sharing and empathy are a means of creating a good image of a given tourist destination. Very often, the tourist trusts the positive ratings for the specific destination, instead of an advertising banner, for example (Yordanova, 2016).
- Providing some stimulus such as opportunity to receive a reward for the customer if he is active enough by commenting, sharing or posting specific marketing campaign.

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# 2. Methodology of digitization in hospitality.

Digitization in hospitality aims to support the customer in his journey starting from simple visit to the web-site of the organization and finishing with the booking in it. In this regard, the stages of consumer decision-making in the hospitality and tourism context are as follows:

- 1) Feeling the need/need for rest; at this stage, the customer, motivated by his needs, decides to inform about different holiday alternatives. For this purpose, the role of virtual communities or travel blogs are very essential, as advice and recommendations from similar individuals are accepted with greater trust than traditional advertisements.
- 2) Search for information; at this stage, information obtained from social media is important. Here it is also appropriate to use web blogs, because the content they offer is unobtrusive and can be trusted. In case the travel blog reader finds himself in the blog post and in case there is a similarity between him and the profile of the author of the post, then his post acts very strongly. It is about the process of cognitive personalization, that impacts significantly on the purchase decision. We consider that during the search for information about a given tourist destination, the potential tourist's reading of publications and comments passes through both types, with the aesthetic being important in view of making the final decision to visit the tourist site. The specific feature of travel blogs is the imperceptible transition between advertising and recommendation of a tourist product.

The leading trend in tourism marketing is the lack of consumers' trust on traditional forms of advertising. That's why customers rely on advice from their acquaintances, as well as people with similar interests or goals. In this sense, the role of the travel virtual communities from chap. of impact on the process of making a purchase decision by the potential tourist is leading (Yordanova, 2016). Therefore, we believe that the sharing of impressions, opinions, experiences in an electronic format, by means of digital technologies, is the most effective and effective as a form of advertising communication in the conditions of an information society.

In addition to virtual communities, tourism as an industry has been affected by the advent of second-generation web digital technologies, the so-called web 2.0, which facilitates users in generating informational content without having specialized computer skills. Tourist virtual communities provide assistance to the tourist at the various stages when making a decision to visit a given tourist site:

- Information research on the various destinations;
- During the actual stay at the given tourist site;
- Sharing the experience after the visit itself. In this sense, the most useful tools for sharing impressions are: blogs, wikis, technologies for combining and reporting (Really Simple Syndication RSS); microblogs such as Twitter; social networks; social news and bookmarks; content sharing platforms (Popova, & Marinova, 2021). According to Mirasol&

Cunanan, 2017 tourist behavior can be better observed and analyzed when tourists recreate their travel experiences and what they do in weblogs. Along these lines, Dohmen (2013) also found in his study that readers prefer online sources, including travel blogs, to traditional magazines or print forms of advertising. Online sources, including travel blogs, are preferred by readers at four of the five stages of travel, which include: dreaming, planning, booking, experiencing and sharing. The survey showed that in all five stages, except booking, including online sources, blogs are preferred by readers. Moreover, Buted (2014) concluded in his research that social media, including blogs, are frequently used by representatives and professionals from the hospitality and tourism industry, due to the accessibility of these sources and from their effectiveness (Mirasol& Cunanan, 2017).

3) Evaluation of the various alternatives as a stage of the customer's decision-making process. For the evaluation of the different alternatives, virtual communities are again used, and the evaluation process itself depends to a significant extent on the type of user, i.e. whether it is solely a comment reader, content creator or critic. In other words, the way a consumer feels about a particular brand or product is important, having a very large impact on his/her purchasing patterns (Yordanova, 2023). In their research, they look at the impact social media has on where people express their life situations based on how they feel about certain topics. Therefore, all social media

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are ready to present a platform that allows users to feel, be able to express and challenge their feelings in front of their peers. Liveliness is one of the most important elements today when it comes to a successful campaign (Usmani et al., 2019). Therefore, in their study, Usmani et al.2019, believe that advertising that has been successful in recent years is related to creating positive emotions in people, as the dimensions of Facebook posts of brands work in terms of interactivity, vividness, consistency of brand, novelty and type of content. The ways in which these dimensions affect user likes, comments and shares of these posts on the social network Facebook are investigated, revealing that brightness has a positive significant effect on user actions, but not on likes. At the same time, interactivity negatively affects both likes and shares (Usmani et al., 2019).

4) Making a purchase decision by the user. In order to make a purchase decision, the user is influenced by the content of the web site, the web blog, the corresponding publication in the virtual community. As Yordanova, 2023 discussed, content is a very important component, not only to attract attention, but also to facilitate the user in his choice.

Content is very important when it comes to attracting the attention of the user and providing a brand image (Usmani et al., 2019). Good content portrays the high value of the brand and affects consumers by changing their opinion and strongly embeds a message from a marketing perspective. Content characteristics such as informational or entertainment content play a major role as a stimulus that affects user responses. Also explored is how different attributes of brand posts influence online customer engagement.

Interactivity, vividness, and type of content have been found to influence user engagement in terms of liking, commenting, and sharing (Usmani et al., 2019). Another instruments for digitization of the organization in hospitality and tourism are presented by the artificial intelligence and robotics that can be used to help the user with their booking. Chatbots have been used on social media platforms, enabling customers to ask questions and receive near-instant answers, 24 hours a day, seven days a week. This is invaluable to hotels because it provides speed and instant response times that are almost impossible to maintain in person-to-person interactions.

One of the most recognizable examples is Sam, an intelligent travel chatbot that is particularly useful for frequent travelers and business ones (Citak et al., 2021).

With artificial intelligence, it can set up a chatbot in the hotel to offer each user a personalized experience. Even before a traveller makes a hotel room reservation, he can start enjoying this unique experience. For example, AI-powered chatbots can help with customer decisions. Chat-bots are useful in the decision-making process as they track the conversation and based on the user's preferences make relevant and relevant recommendations based on intelligent follow-up questions (Yordanova, 2023). In other words, a hotel chatbot can help a traveller to organize his stay properly by recommending diverse rental services to places to visit to culinary discoveries, nothing will be overlooked with the tool (Citak et al., 2021).

- 5) Preparation for the holiday or trip and implementation of the vacation itself; In order to achieve an excellent experience for the tourist, many factors influence, such as the quality of service for example. In this regard, artificial intelligence and robotics as forms of application of digital technologies can help to increase the satisfaction of the customer of the tourist service. The assistance they provide to the customer in the booking process can be of great help as they not only encourage him/her to book the hotel but also help to complete the booking. The practice shows that often more than half of travelers interrupt their reservations in the middle of the trip for various reasons. However, the personalized assistance of a chatbot can be of great help during this process by facilitating the traveller and giving him certainty in his choice. Of course, hotel chatbots can also help with the decision by asking a series of clarifying questions, and the device will know roughly the available budget and make suggestions to the traveler accordingly https://botnation.ai/.
- 6) Tourist satisfaction and evaluation of the holiday and tourist experience. The tourist is satisfied when the post-purchase evaluation reveals a higher service quality than the guests' expected service quality (Cobanoglu et al., 2011). This situation is the goal for each hospitality organization. Therefore, researchers Zeithaml, Bitner, and Gremler (2006) suggest that customer

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satisfaction has a direct impact on customer loyalty. Various studies have investigated the relationship between service quality, customer satisfaction and loyalty (Cobanoglu et al., 2011).

### 3. Discussion.

7) The effectiveness of digitization in the organization in the field of tourism and hospitality as an economic category expresses the ratio between an achieved outcome variable and a given target. Under the effectiveness of digitalization, we understand to what extent the achieved results correspond to the goals set by the organization in the field of tourism. Determining customer's engagement is a very important point. By the degree of engagement, we mean how active the so-called active users are. To this end, we apply the following criteria to be used at the various stages of the visitor's interaction with the organization in the field of tourism and hospitality.

Indicators for evaluating the effectiveness of the user's interaction with the organization in the hospitality industry:

- Average time spent browsing the organization's website; It is suitable for measuring the interest of the visitor and proves customer interest.
  - Total spent time on the site;
- Total number of likes, of publications in social networks on the occasion of thematic events organized by the hotel/restaurant;
  - Number of publications made by the respective tourist;
  - Total number of responses received by the author of the relevant content;
    - Number of votes collected by the author on the given topic;

In our view, the challenge for managers is to determine how informational content affects members of a travel online community or travel weblog. For this purpose, we suggest using the following criteria:

- Number of friends the given user has;
- Number of posts by the author;
- Total number of likes of the published content by the user;
- Total number of people who viewed the given post;
- Average number of people who viewed the publication;
- Total number of reactions to the content published by the user (Yordanova, 2016).
- Average number of people who responded to the user's post;
- Total number of ideas published by the user;
- Total number of active events created by the author.
- Number of likes of the given event;
- Number of shares; One of the most used metrics to track the long-term benefits of community building is the significant reduction in user acquisition costs. By creating their community, managers not only invest in content, but also start building the brand and recognition for the company. The more familiar the community becomes, the less effort must be made to attract individual customers. The main advantage of the online community is the lower cost of attracting new users (Yordanova, 2016). Another important measure is the satisfaction of the tourist, the guest, which is reflected in the number of posts, comments in the relevant tourist online community or travel blog.

### Conclusion.

As it became clear in our presentation, digitization can be applied in all organizations from the field of tourism and the hospitality industry. However, each of them has its own goals and expectations virtual space. If for some hotels, the main purpose of online presence is the use of the Internet as advertising channel, then other hotels and restaurants are oriented towards achieving overall efficiency, and hence satisfaction of its users, tourists. Most organizations in their quest to cut staff costs are increasingly turning to the use of digital technologies in your business. In our opinion, it is it is necessary not only to seek to reduce costs, but to carry out a benefit and loss

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assessment of the application of artificial intelligence for example in the operation of the hotel or the restaurant. Many managers are not aware of the expectations or ready to implement AI because that's what competitors do.

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