



INTERNATIONAL  
HELLENIC  
UNIVERSITY

# **Digital Transformation:**

# **A case study of a medium-**

# **sized Greek Travel Agency**

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I hereby declare that the work submitted is mine and that where I have made use of another's work, I have attributed the source(s) according to the Regulations set in the Student's Handbook.

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# **I. Abstract**

In the last decades, the process of digitalization is evident and perceptible in all life and business sectors. Digitalization indicates a transition to different business models. An accelerating number of companies are reacting to emerging possibilities and challenges arising from digital technologies through the introduction of digital transformation policies throughout the company in order to actively tackle their digital transformation. This dissertation was written as part of the MSc in Management at International Hellenic University. The survey is based on a case study of a medium-sized Greek travel agency in Thessaloniki, Greece. An exploratory research on the digital maturity of the firm is carried out along with an investigation on the available digital and innovative technologies

*Keywords: E-business, Digital Transformation, Travel Agencies, Innovative Technologies, Tourism Industry*

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## **1. Introduction**

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Travel and Tourism sector is considered a fast evolving and constantly elevating industry that contributes significantly to the world's economy. Travel Agencies (TAs) and Tour Operators served throughout the years as various components of this sector by heading the process of travel experience creation. Due to the accelerating technological developments that are emerging and changing the business cultures, they need to reorganize and reinvent their business as well as to set a new value proposition in order to cope with the demanding circumstances. Especially, these changes create difficulties and disorientation to TAs that are at the beginning or during a digital transformation. To some extent, the success of a company relies on its capacity to obtain and use updated technology to help its management and marketing procedures (Law, Leung and Buhalis, 2009). Our introduction covers the past, the current state and the potential future of Travel Agencies regarding Technology.

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## **1.1 Role of ICT in Travel Agencies**

Travel Agencies perform as intermediaries that act between the suppliers of tourism products and services (airlines, hotels, car rentals) and the consumers. Travel Agents arrange an enormous load of information and help the traveller reach the best possible choice. They offer recommendations on destinations, tours, accommodations and any other closely related deliverable that can add on the travel experience (Feldman, 2015). Tourism products' and services' information are promoted and sold through marketing techniques and rely heavily on up-to date Information and that is the reason why Information and Communication Technologies (ICT) are in the centre of global travel distribution.

The relationship between ICT and the Tourism Industry is dynamic and the developments detected in the ICT sector are constructing new behavioral and consuming realities and patterns, whilst they offer opportunities for enterprises to grow and evolve but simultaneously they impose the threat of substitution. The use of internet and the e-marketplace along with the high competition and the altering of customer needs have fundamentally changed the travel services scene (Novak and Schwabe, 2009) and subsequently new entrants weaken the traditional business models and the brick and mortar travel offices.

Regarding the history of ICT and TAs, the Computer Reservation Systems (CRSs) make their appearance in the 1970s and TAs acquire certified access, whereas in the late 1980s the Global Distribution Systems (GDSs), i.e. Amadeus (founded in 1987), Galileo (founded in 1988), emerge into businesses and they thrive in formulating operational and strategic practices by giving real-time reservation and booking information (Warner, Quadri-felitti and Chandnani, 2010) . By that time GDSs entrusted massively their existence on TAs. However, from the late 1990s with the wide spread of the Internet, the interaction between ICT and TA is being intensified and is approved to be an immediate cause of the constant transformation in both the Market and the Channel structures (Berne, Garcia-Gonzalez Margarita and Mugica, 2012). Hereupon, with the rapid deployment of Internet there is great automation of tasks (e-Tickets, on-line hotel

bookings) and this is even more signified with the introduction of e-tourism and e-commerce (Law, Buhalis and Cobanoglu, 2014). Consequently, online travel developments created new conditions and decreased steadily the dependency on traditional TAs. Concretely, Industry suppliers understood that they can serve as new communication and distribution channels that can communicate directly with the consumer (Luke Bujarski, 2017) and that is the reason why they invest in brand websites, Online Travel Agencies (OTAs) and booking engines and they surpass the intermediaries. In the past, almost all consumers were attending their local travel agency to get informed and to satisfy their travel wishes. Nowadays, travelers are influenced by the developments in speed of networks, in search engines and carrying capacity and a great number of them uses technologies for the planning and experiencing of their travels (Buhalis and Law, 2008). Scientists proclaim that this electronic penetration, which they called the threatened intermediaries or disintermediation hypothesis, will eliminate the era of middlemen (Zare and Chukwunonso, 2015). However, the developments in ICT can revolutionize the corporate culture of a TA by re-engineering and by implementing innovative strategies and operations that will re-invent their roles and increase productivity. They assert that reintermediation can only eventuate if TAs themselves embrace the new technology and arise as a new category of travel intermediaries (Zare and Chukwunonso, 2015).

## **1.2 Structure of the study**

This thesis is divided into five sections:

- A presentation of the relationship between Travel Agencies and digitalization, in which definitions and requirements are demonstrated.
- A display of the Information Communication Technologies (ICT).
- The evaluation of the digital maturity of travel agencies and their professional necessities in reference to digital practices and ICT implementations through a case study.
- The assessment of the findings and the problematics raised within the case study accompanied with suggestions.

- The discussion over the potential barriers and requirements.

First of all, within a theoretical framework, we present an overview of the requirements appeared and the challenges confronted by travel agencies during the transition phase from a traditional business entity to a digitalized and up-to-date company. Moreover, we present the reasons why the physical presence of Travel Agents can compete with the impersonal current situation that is characterized by online distribution of travel products. In the second section, we state an overview of the E-business applications as well as their usage and significance. We try to display the major technological advancements that are subjected to the digital transformation of the internal and external environment of a travel agency. In the third section, we analyze a case study and we bring into focus the digital maturity of a Greek travel agency and its relationship with technologies in order to measure its level of digitalization and to recognize its needs. In the fourth section, the first collection of data is gathered via a questionnaire and we conclude in defining the digital maturity, whereas the second collection of data is gathered via an interview in order to lead us to a further investigation of innovative technological solutions. In the last section of the study, we discuss in reference to the current state of travel agencies, the requirements and the barriers confronted by the implementation of all the above.



## **2. Theoretical Framework**

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The theoretical framework is a substantial element of the research. We propose a theory-driven approach on the dynamic relationship between travel agencies and digitalization and their significance as part of the travel value chain.

### **2.1 Digital Transformation**

A various obstacle confronted by bricks and mortar Travel Agencies is the challenge of digitalizing the services and transferring the technical support nature of IT to an e-business environment, that includes integration or migration into effective e-business applications, information systems, front ends (particularly web-based) and backend systems (legacy applications that runs the company's critical operations) (Zare and Chukwunonso, 2015). Regarding the application of e-business practices along with the value creation, the online interactive presence in combination with the Social Web is a substantial step to digitalization. It requires though both an internal and external corporation alignment to advance the customer relationship, to promote themselves online as well as to profit with collective intelligence during co-creation experience (Salvado, Ferreira and Costa, 2011). Rob Torres, the managing director of Google Travel, consults the Industry Players to preserve presence on relevant channels (online and traditional), to be regular on sharing plentiful and relevant content and to establish a constant online and offline brand experience (Rensburg, 2014). Despite the fact that clients have the ability to utilize web innovation in correlating and comparing offers, that strength comes with the price of time in navigating through a vast and complicated amount of information from different distribution channels. Consumers likewise should be aware that OTAs and meta-search engines use variegated algorithms that don't necessarily give the best available price. Therefore, TAs still own a competitive advantage as their services are built upon mastery, access to arrangements and advantages that are not approachable by individuals together with actualization of better offers through their connections. Accordingly, TAs need to realize a customer engagement plan that relates to travel buying and consumption process, which includes

the dreaming, planning and comparing phase as well as the consumption (physical travel experience) and support (interventions required during travelling) (Rensburg, 2014). A digital advancement that contributes to this plan is introduced as Customer Engagement Technology (CET) and incorporates an extensive variety of applications (social-, location-, and mobile- based applications) that simplify tourism related processes (Thakran and Verma, 2013). Hence, the main goal of a TA is to follow digital marketing practices that rely on customer centricity. Traditional TAs need to establish online resources, mobile marketing and electronic commerce technology in order to intensify visibility and reach and to enter the buyer's consideration set (Tsang, Lai and Law, 2010).

## **2.2 Adapting to change**

. Companies and their employees need through advanced training in technological, organizational and business performance to reach a certain knowledge level in order to have the readiness to invest, proceed and operate ICT (Rensburg, 2014). Hence, there has to be a change in the role of electronic data processing or information systems department , namely to become from merely technical support provider to senior management advisor on how to adopt IT in an agile way to achieve business goals. (Law, Leung and Buhalis, 2009). As a result, business problems caused by the rapid development of new Technologies, can be addressed through re-evaluation of the value proposition of TAs and through regeneration of business goals. This repositioning is accomplished by designing new strategies that are accompanied by ICT adoption and incorporation of interactive Technologies and Internet channels that include tactics of direct customer satisfaction, value creation, relationship marketing and hedonic information systems (Novak and Schwabe, 2009). ICTs are essential for TAs that are receptive to the significance of handling and exploiting information of the travel industry. ICTs can also function as a cost management tool that can reduce labor costs and increase efficiency by redesigning processes and by eliminating repetitive tasks (Buhalis, 1998).

### **2.3 Value proposition of TAs**

Before moving on to the requirements for the digital transformation of a traditional TA, we would like to elaborate on the significance of the physical presence of Tour Operators and TAs compared to the exclusive dependency of a consumer on OTAs and meta-search engines. First and foremost, tour operators can deploy an immediate relationship with the client that transmits trust and confidence as well as assurance throughout the traveling process (dream-plan-book-experience-share). Within this framework, the client feels secured and supported, when and if something takes the wrong way, i.e. flight, passport or suitcase loss, refunds, change of plans. The Tour Operator with his expertise can consult the traveler, intervene to the situation and fix the problem, whereas OTAs and meta-search engines, because of their impersonal nature and the exclusive presence on Internet, cannot react in the same way. Subsequently, because there can be off-balance factors during all the travel stages -something that is not exceptional-, that can cost time, quality and money and the provision given to a TA is of minor expense considering the profitability in terms of all the other unpredictable costs. Although, nowadays Internet and online purchases play a dominant role in our lives, human contact and connection still remains an irreplaceable asset. Moreover, customers are exposed to a vast amount of travel information online and they can use crowd sourcing in order to achieve a cumulative result, but the problem is that not all the available sources are validate and trustworthy (Zare and Chukwunonso, 2015). Regarding this aspect, Travel Agent's job is to possess the knowledge of "where", "which" and "how", to organize and rank the information and to certify the reliability and validity of goods and services offered. Furthermore, when there is a group of people wanting to make a trip whether for leisure or for business, there is difficulty and complexity in arranging everything. Travel Agents are trained in handling those situations, they can coordinate tailor-made experiences and because of their professional identity they have even contracts with aviators and hotel suppliers and therefore access to special prices. Nevertheless, the advantages of a TA can easily get defogged by the intense proposition and presence of OTAs and meta-search engines and that is the reason why TAs should employ new strategies, acquire online presence and



transform traditional practices to digital in order to stay competitive and to underline their value.

### **3. E-business Applications**

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E-business is defined as the beneficial use of Internet-based computing and communications in order to administer both front-end and back-end business processes(Wall, Jagdev and Browne, 2007) with the help of ICT. The application of e-Business enhances the quality of service, promotes products, saves up money and leads to high performance and efficiency. The challenge for a TA is concentrated in building strong relationships with their core customers and this is achievable by customizing content across different channels for different portions of the customer journey (Luke Bujarski, 2017). In order to define and analyze the sections of digital transformation, we are clustering the actions to be taken in two major categories:

- Automation and Personalization
- User Experience.

#### **3.1 Automation and Personalization**

As every business environment, TAs need to manage accounting and sales issues, as well as human resources. Before the introduction of ICT, TAs used to manage all units and tasks manually and voided of technical support that endorses the above mentioned internal functions. The manual handling of internal tasks is addressed nowadays through the automation of processes. Moreover, TAs because they are service-oriented businesses, have as one of the most significant units that drives the success of their operations, the right handling of customer information. All information details used to be concentrated in each sale representative, something that creates a serious issue because of disordered information management and of the risk of material damage due to customer loss (Li *et al.*, 2018). Each customer behaves in a unique way and brings his own load of experiences, desires and ambitions and customer profiling is of great importance for a company because it can achieve greater customization, personalization and interaction between consumers and the TAs (Buhalis and Law, 2008). In the new and fast-evolving digital age, customers are getting used to receive personalized content and this is achieved by building and automating personalized campaigns through the

digitalization of customer information, namely the transactional records, the profiles, the requests and the services and through user behavior tracking by actualization of data analytics tools (Luke Bujarski, 2017). Consumers are subjected positively in sharing their personal information, when it comes to receiving higher quality services. Overall tourism organizations can provide better services by understanding how various markets enjoy different tourism products and services as well as by enhancing the possibility to promote suitable products, to develop their online profile and to include personal data that indicate their preference. The goal is to mark customers' journey over multiple devices and channels by including also every service phase -before, during and after the visit- in order to comprehend all the behavioral aspects, the concerns and the determinants, to process accurately the information and to react instantly (Buhalis and Law, 2008). The implementation of automation, digitalization and data analysis are directed through proper technological systems and software such as Enterprise Resource Planning (ERP) and Customer Relationship Management (CRM) that with their functions can also produce results of fragmentation and personalization. Advanced CRM systems are able to record customer requirements and preferences for both present and future usage (Piccoli *et al.*, 2003). Despite the fact that we clustered automation and personalization in two different categories, because they have different objectives, we realize that the above mentioned software are satisfying completely the requirements of each. After presenting the ERP system, we focus on the CRM software as its advanced models are including all ERP features

### **3.1.1 ERP**

An ERP system or software package is a powerful business tool able to manage everyday business activities, such as accounting, procurement, human resources, customer relationship management, reporting, collection and presentation of data and beyond. ERP's strength to integrate all functions into one complete system and to streamline operational processes and information across the whole organization, is eliminating any manual activity held within the company and leads to the digital transformation of its internal units. Netsuite, a Business Management Software Company, stated that the main characteristic of an ERP is its shared database that supports numerous functions from different business divisions.

### **3.1.2 CRM**

By the implementation of CRM technology the company can accomplish high levels of customer loyalty and satisfaction by concentrating in one database all customer documents and information across multiple channels, i.e. enterprise's website, social media and any other possible connection that exists with the client. Hence, customers' personal information, special preferences and purchase history can be arranged in order to create profiles that will enhance the customer service of the enterprise and will set the basis for the achievement of strategic objectives. CRM systems rely their efficacy on data mining techniques, by which large banks of information are sorted and reveal the application regularity of hidden or non-identified and -trivial data to generate and predict models and new information, such as buying patterns and behavior. Data mining technology is embedded in CRM software with features as association analysis, category description, classification and forecasting analysis, isolated point analysis and evaluation analysis. The produced data are concentrated and stored in a data warehouse and afterwards are being processed to be used in customer relationship management (Xie and Tang, 2009). According to Techtarget, a company that offers data-driven marketing services, a CRM software, nowadays, has evolved its utility and it isn't restricted to only collecting customer information in one database, but it has additional features such as recording, automating workflow automation processes, managing human resources, the ability to trace productivity and performance as well as the automation of repetitive tasks and prediction of future customer behaviors by the implementation of AI technologies.

### **3.2 User Experience**

The role of User Experience radiates the emotional connection with client's needs. The User Experience Association characterizes User Experience as any form or aspect of the user's interaction with a service, product or company that constructs the user's perception of the whole. User experience design as a discipline is affiliated with all the components, i.e. visual design, layout, brand, text, sound and interaction, that together constitute that interface (Michael Georgiou, 2018). All these features are connected to the digital environment and are offered by companies as an e-service that retains,

excites and attracts customers by reaching, understanding and promoting their needs. Hence, Internet is broadly used as a communication and information model and the tools available in combination with a CRM software can be exploited by companies in order to offer tailor-made services to users. The services of a traditional TA that range from information to transaction and reservation are offered usually in an offline-mode, meaning via face-to-face or telephone communication and they are further supported via e-mails. However, these days the online presence of companies with e-marketplaces and e-commerce as well as the online communities have changed customer needs. Especially, when it comes to travel services, customers have immediate access to suppliers surpassing the intermediaries, namely TAs. Additionally, many travel community sites as TripAdvisor and Booking, have also changed the traditional communication system of supplier-to-consumer to an open e-space communication of consumer-to-consumer (Rensburg, 2014) and are already capitalizing on the rich content generated among users. However, TAs can reinvent their role and highlight their value proposition by adapting their businesses and by developing their services in an online environment. Concretely, TAs can emphasize on user experience creation through the exploitation of online tools, such as a well-designed associated Internet platform (website) with an abundance of information available and e-RM (e-Relationship marketing) and active social media accounts that can contribute in company's branding by producing favourable UGS (User Generated content) and e-WOM (e- Word Of Mouth) as well as valuable customer data.

The second element concerns the emotional dimension of customer needs. On the one hand, the travel advising process is highly emotionally colored—customer criteria can rapidly change based on impressions of presented alternatives: a terrific photograph, a compelling video or a funny anecdote can easily shift customer desires and create emotional responses.

### **3.2.1 Website**

The online presence is a vital part of business life. The creation of a website and the utilization of all its possible capabilities is a way for TAs to adjust to the digital environment and to add value on their services and operations. Moreover, it serves as

an overseas branch equivalent to physical location. Nowadays, when people wish to get informed and buy products and services, they first go online. A website is a “shop window” that functions 24/7, is a mean for promotional activities and communication, can approach global markets, provides credibility, can offer online support and transaction safety (Choi Sang, Kowang Owee and Hii, 2018). Internet technology is a powerful tool for TAs that can achieve corporate goals along with competitive advantage by customizing information and by offering unique content to each user. The problem is that many TAs’ websites contain usually institutional and static information and in order to move into the e-business environment, they need to implement innovative ICT tools, such as Travel Recommender Systems (TRS) (Salvado, Ferreira and Costa, 2011). There is no reason in adopting a simplified website model that acts as a communicator and adds value only on the current operations. The development of a TA can be realized by the integration of an alternative business model and strategy that will be subsequently implemented in the website. The website can act as a navigator, an advisor and potentially as an aggregator (virtual travel agency model) (Standing and Vasudavan, 2000). The success and effectiveness of a website relies heavily on the alignment of strategies with the selected utilization of web features, the quality of information and the design. In this context e-commerce with right product distribution, e-support with direct communication to the customers, e-marketing with targeted campaigns and web design with engaging layout are essential parts for the good functionality of a website. Moreover, successful website platforms understand better the consumer clicking behavior and gain insight into customer’s preferences and needs (Law, Leung and Buhalis, 2009).

### **3.2.2 Social Media**

Travel Agencies should emphasize in every segment of the consumer journey in order to enhance the user experience. Concerning the tourism industry, peoples’ behavior has always been modified and adjusted according to the changes and advancements in ICT. The significance of online communication and connectivity through social networks is evident, as a great number of travelers shares daily on the web, among others, personal experiences, opinions and photos. Companies can use consumer social networking sites, such as Instagram, Facebook and LinkedIn, as customer engagement tools or means of

communication in order to improve business operations and also to contribute to cumulative revenue or cost controls (Salvado, Ferreira and Costa, 2011). The integration of Social Media and their linkage to the company's website can succeed in attracting new users and in creating Virtual Customer Environments (VCEs) that provide opportunities beyond traditional e-commerce. VCEs reach great interactivity and profitability by favoring customer service and support, product development, sales and branding (Culnan *et al.*, 2010). Consumers are getting informed and influenced by the dynamic content of social media networks and they leave traces of their preferences both from their online journey and their own uploads. Additionally, if the traveler continues in the long run to choose as source of interaction the company's social networks and website, the company's trustworthiness and validity is getting strengthened. As a matter of fact, the travel planning and the decision-making process of an individual relies heavily on the credibility of UGC and e-WOM, which usually comes in the form of online reviews (Law, Buhalis and Cobanoglu, 2014). Among the online goals of a TA, stand the informative and reach content and the framing of reviews. Subsequently, when tracking down the customer on his online journey, there is a vast amount of behavioral data available that when combined with the historical data of a TA for its clients, then it results in acquiring intimate customer knowledge. In parallel, the exploitation of the upcoming insight with active and targeted web marketing, can augment the customer engagement and can multiply the sales. Within this framework, TAs should take into consideration the emotional aspect of customers regarding the online distribution of tourism products, as this is directly connected with high expectations, because it's an investment of money and time (Luke Bujarski, 2017). As a result a travel company should be aware of the importance of meaningful information distribution and right targeting in order to preserve healthy digital connections with their clients.

### **3.2.3 Mobile Technology and Applications**

The user experience paradigm is contained in the development of mobile technologies and applications. As we live in a networked world, mobile devices are omnipresent in our daily life and serve as key distribution channels, as they offer instant communication, interconnection and knowledge through their wireless, smart features and applications.

Consumers can have immediate access anytime and from anywhere to information, products and services by using their mobile devices (Bart, Stephen and Sarvary, 2017). In the context of ICT application, the tourism industry should take into consideration the mobile technology implementation, because the vast use of smartphones is continually changing the user experience and therefore the business environment. Mobile technology includes features as location-based services, dynamic interaction with tourism suppliers and interpretation at the destination, that offer convenience to the customer by extracting timely knowledge and realizing requests (Buhalis and Law, 2008). A TA could exploit the instant communication advantage provided by the mobile technologies and strengthen the user-experience through a mobile user-friendly website and an application, in which m-marketing, advertising and proactive service with mobile auctions and mobile entertainment services could be deployed (Networks, 2002). Hence, TAs can add more value to their operations, to take one step further to their digitalization in order to maintain their competitive advantage.





## **4. Research and Methodology**

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This chapter describes the methodology used to complete this project. First of all, the project's research design will be introduced. Afterwards, the methods of research will be established accompanied with the process and area. In addition, this investigation's limitations will be reviewed.

### **4.1 Research Design and Approach**

Research philosophy is the overall strategy used to gather, analyse and use data and to integrate them all in a coherent way. The design of the project is substantial in deciding the type and sub-type of the study. In this project, we have chosen for our dissertation to present a case study, as part of an exploratory in-depth research of existing evidence, in order to provide a significant insight in our topic. The case study is a research strategy that aims to understand the dynamics within individual environments. A case study is also a prominent research method regarding businesses. Concretely, case studies are directed towards analysing certain questions within the limits of specific situations, settings or companies. The design of case study research was described by Yin (1981,1984). Yin considers that a case is an event, an individual, an entity or even a unit of exploration, where a contemporary phenomenon is empirically investigated within its real-life context with the use of multiple sources of evidence (Noor, 2014).

Case studies are categorized in three different forms: Exploratory, Explanatory and Descriptive. The applied type in our research is the descriptive and it is used to describe an intervention or phenomenon in the context of real-life events(Baxter and Jack, 2008). Moreover, case studies can include either single or multiple cases and a variety of analytical levels (Starman, 2013). In our study we decided to concentrate on a single case from which, through the use of different methods, the data will derive. As a matter of fact, the research design underlines the significance of the context and the collected data that are particularly referred to the organization analysed. In parallel, we set the boundaries of the research in order to define which is the field of study. It is quite often the case, researchers having difficulties concentrating on a main topic as a problematic can entail many objectives and can be too wide. Hence, establishing limitations is

important because it defines what the case will not be. The research following is designed to examine the digital maturity of the travel agency *Travellook* as well as the potential digital implementations that were presented in Chapter 1 that can drive digital transformation.

## **4.2 Methods of research, Process and Area**

Researchers in theory building usually combine several methods of data collection that can be approved as highly synergistic. Case studies typically combine methods of data collection like archives, interviews, surveys, and observations and the evidence used can be qualitative, quantitative or both (Eisenhardt, 1989). The qualitative data is useful to understand the justification or theory of the relationships founded on quantity data or can directly suggest theories, which can then be reinforced by means of quantitative support (Jick, 1979). We selected to collect our qualitative and quantitative data through a questionnaire and an interview. The questions selected to build the questionnaire are based on two main sources of relevance, that of the global research by *Vanson Bourne and Dell Technologies*, that investigates the implications of digital disruption around the world and that of *the Digitalization in Tourism Report* of Aalborg University that consists of an in-depth analysis of the challenges and opportunities confronted in SMEs. Our main goal is to project the findings objectively and in a reliable form as well as to set the basis for future researches and updates regarding this field of study.

The majority of the data collected in this project derive from our primary research concerning the questionnaire's answers of the staff and the manager of *Travellook* that include both qualitative as well as quantitative findings. Additionally, collaboration documentation, information on the vision, mission and objective of the case company as well as its evident existent digital image (website, social media) are used.

## **4.3 Research Limitations**

The results of our search have to be narrowed down based on some limitations with inclusion and exclusion criteria in order to help us answer our research questions. Although, digital transformation has many important pillars to consider in a business context, we focus only on the digital maturity and not on strategical and structural

business aspects. We refer to basic information about the bone structure and identity of the company as well as the overall objectives and then we continue to the questionnaires findings.



## 5. Data Analysis

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In the context of digitalization and with a focus on the perspective of innovation in the TA's culture as shown, a case was chosen. The case has been chosen as a representative sample in the business center of Thessaloniki. This chapter focuses on examining the digital maturity and readiness of the travel agency *Travellook*. The questionnaire is addressed towards its seven employees and its manager and the findings are being reported and interpreted.

### 5.1 Overview of The Company

In 1964 Paraskevopoulos Stavros launched one of the first migrating Travel Agencies in Thessaloniki under the *Paraskevopoulos Tours* designation. By that time there were three more industry players in Thessaloniki's business scene. The office succeeded the next two generations, until it stopped its business activity.

In 2006 Paraskevopoulou Eleni, a third generation member, established the travel agency *Travellook* that runs successfully until today. Overall there are more than fifty years of tradition in the Travel Industry.

#### 5.1.1 Organizational Structure and Identity

*Travellook* is considered an independent small-sized travel agency and its workforce consists of eight renowned employees that offer their expertise and services with respect, responsibility and consistency. Independent travel agencies put emphasis on outgoing activity, with 3 to 5 professionals in their shops, while the ones in the closed policy networks, diversifying fields of action (outgoing, incoming and operator), with 11 to 20 employees (Salvado, Ferreira and Costa, 2011). The firm's clientele is mainly consisted of outgoing business travellers and corporations that require travel support throughout the year based on their operations abroad but also within Greece. *Travellook's* mission is to serve the customer in the best possible way by satisfying his personal needs, by guiding him accordingly through the travel network, by bringing him in contact with the right partners and by accompanying him throughout his journey. The

company's headquarters are located in the centre of Thessaloniki and are operating both under the EOT license and under the IATA certification.

In reference to the revitalization and digitalization of the medium-sized travel agency *Travellook*, the implementation of new technologies and practices is crucial. We take under consideration the interview of the manager and the personnel that took place in the context of the problems confronted within the business culture.

Vision	To be Thessaloniki's leading corporate travel agency.
Mission	To exceed customer's expectations and to respond accordingly to their unique needs.
Business Concept	With a healthy organizational culture, a sustainable environment and a customer centric approach to create added value to all aspects of the firm.
Overall Objective	The digitalization of operations and the enhancement of customer experience that will drive to satisfaction, retention and to profitable growth. This will set the base for the mission's implementation and the vision's fulfilment.

### 5.1.2 The Current State of Travellook

*Travellook* is experiencing determinant changes in its nature and structure that are owed to the introduction of new technologies. The rapid dissemination of Internet and the increasing interconnection has contributed in the widespread flow of information regarding world destinations and as a consequence in the change of consumer's behaviour. Traveling is recognized as a major trend and a substantial part of an individual's life because nowadays people invest more and more in experiences rather than in properties and commodities. This situation has caused an excessive amount of traveling stimuli and a chaotic information environment that challenges the firm to reposition itself in the industry and enter the digital and experiential economy. Moreover, because Travel Agencies are usually clustered as medium-sized businesses with 49.7% including autonomous travel organizations and 38.5% including medium-sized enterprises (SMEs), which are associated to the cluster of closed organizations of travel companies. (Salvado, Ferreira and Costa, 2011), SMEs show usually a significant absence of resources in the aspect of financial ability, know-how, equipment and innovation and *Travellook* represents a characteristic example.

From the information given by the manager and the current evident digital image of *Travellook*, we know that the company doesn't have a Customer Relationship Management software (CRM) integrated, owns a website but doesn't have computerized customer reservation system (web booking engine), while its online presence doesn't cover all social media platforms but it preserves an active account in Facebook and Youtube. The majority of traditional, independent travel agencies that have developed a website produced a virtual face on the Internet. Few though have created schemes based on transactions where internet bookings and payouts can be made (Barnett and Standing, 2001).

## 5.2 Interpret Results

Taking into account the answers by the managers and the staff to the questionnaire, we concluded in identifying to what extent is the business mature in order to proceed to its digitalization. It is often seen that digitalization has variations throughout Europe, tourism small businesses generally have a low digitalization level, with the majority of technologies used to facilitate internal e-business operations for small and medium-sized businesses. Technology has been used more limitedly to facilitate e-commerce, and there is little evidence among the touristic companies surveyed that the connectivity and interoperability of such terms as smart tourism and e-governance are on the rise (Dredge *et al.*, 2018).

In the first unit of the questionnaire we raised questions that gather the opinions of the staff and the manager of *Travellook* regarding their level of digital literacy and heading questions about its digital strategy. The following *Image 1* shows the results that indicate a variety of statements with the majority, meaning 6/8 of the staff, being ranked at a low and medium level of digital literacy, whereas the rest is considering themselves at a high level. Effective work performance has always needed expertise and know-how, which is now a fresh and vibrant dimension known as technology. Afterwards, we posed questions that found out that 7/8 (87%) of the staff believes the firm's business strategy is not aligned with its digital strategy *Image 1*. In working with current initiatives to promote and facilitate the transformation of the digital



economy, tourism as a separate sector is included in national and regional digital strategies, incorporating tourism as part of Research and Technological (RTD) policy (Dredge *et al.*, 2018). It is crucial that digital transformation strategies, IT strategies and other managerial and functional strategies are in close agreement in order to perform change.

<b>Job Description</b>	<b>Level of digital skills</b>	<b>Do you believe that the firm's business strategy is aligned to its digital strategy?</b>
General Manager	Low	No
Financial Manager	Medium	No
Travel Consultant	Medium	No
Travel Consultant	Low	No
Travel Consultant	High	No
Travel Consultant	Medium	No
Digital Manager	High	Yes
Sales Manager	Low	No

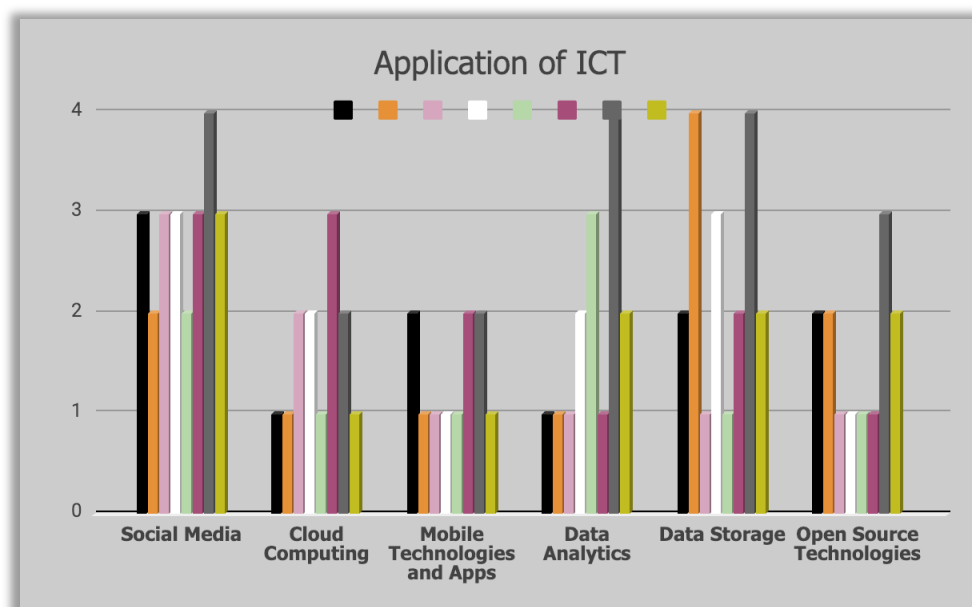
Image 1

Furthermore, we collected the opinions on the degree of the firm's necessity in proceeding to its digital transformation. It is important that the innovation environment of the team or organization is accompanied with the mutual understanding of staff on the value of innovation execution within the team. In a powerful and positive innovation unit environment, staff consider innovation a priority rather than a diversion from or barrier to their current responsibilities. Hence, the results that appear in Graph 1, show that all respondents find the need for digital transformation of great significance.



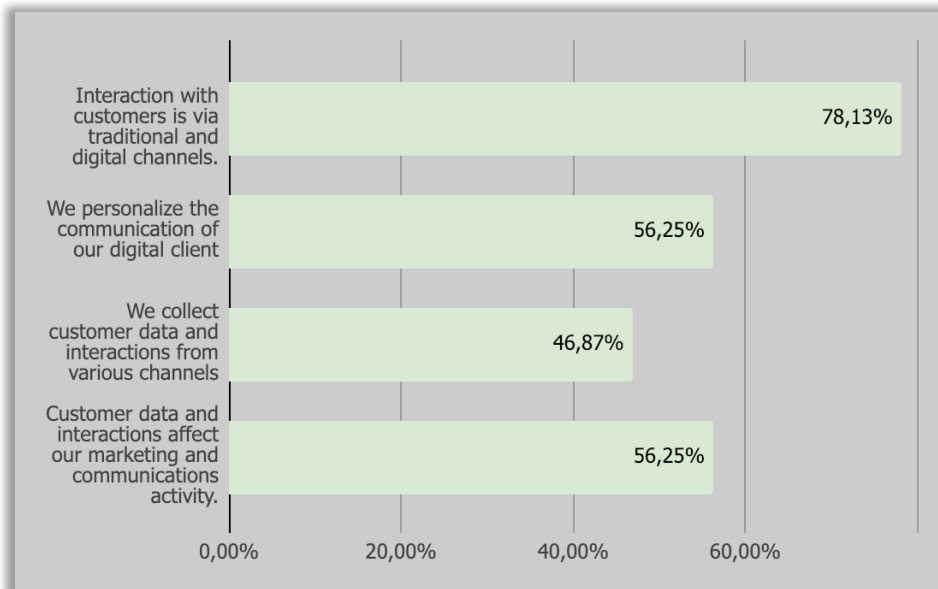
Graph 1

According to the *Digitalization in Tourism* report, on which we chose to base our questionnaire, tourism SMEs have integrated into their activities many basic technologies related to e-business. Nevertheless, technologies related to digitalization at medium to greater concentrations were not as frequent. Our next unit of questions investigates the digital maturity of the firm that is associated with the attitude of the staff towards the degree of integration of ICT into their operations. The Graph 2 contains the answers of the eight respondents on the use of basic e-business applications that are social media, cloud computing, mobile technologies and applications, data analytics, data storage and open source technologies. We can detect that the use of social media presents the biggest percentage of application, as 75% claims to use it at a big frequency, whereas the rest present low results.



Graph 2

The next unit in our questionnaire is related to enhancing customer experience through digital initiatives. The following Graph 3 presents the determinant digital activities that their degree of usage was measured. We collected the answers of the respondents and we present a general percentage that derived from the gradual choice varied from 1 to 4. Our survey shows that 78,13 % of the respondents interacts via traditional (phones etc.) and digital channels (email, social media etc.) A little bit more than the half (56,25%) believes not to personalize the communication of the digital client enough and less than the half (46,87%) believes not to collect in a great deal customer data. Finally, 56,25 % regards marketing and communication activity to be correlated to customer data in a low rate. It is important to listen to the customers, reach them and participate in a double chatter. Companies must use interactive instruments, develop wealthy profiles and share workspaces and stimulate clients to generate content (Salvado, Ferreira and Costa, 2011) The readiness of customers to pay for travel information is reflected in the personalization of the service supplied. Greatly tailored-made services involve extensive customer-service interaction. Moreover, delivering great customer experience is directly affiliated to high service quality, customer satisfaction and retention.



Graph 3

Followingly, we see in Image 2 SME journey towards digitalization. Adapted from: Digitalization in Tourism: In-depth analysis of challenges and opportunities, by Dredge, D., Phi, G., Mahadevan, R., Meehan, E. & Popescu, 2018, EASME Virtual Tourism Observatory, Copyright 2018 by EASMEa summary of characteristics that in reference to which are SME's ranked in a medium or low digitalization level. We detect that according to our questionnaire's findings, the majority of the activities presented at the low digitalization level in Image 2 SME journey towards digitalization. Adapted from: Digitalization in Tourism: In-depth analysis of challenges and opportunities, by Dredge, D., Phi, G., Mahadevan, R., Meehan, E. & Popescu, 2018, EASME Virtual Tourism Observatory, Copyright 2018 by EASMEare operating within the firm but as we have seen in Graph 3, some are being at a low degree implemented. In this case, we refer to the online data storage in accordance to the question on the degree of collecting data from various channels and to computerized satisfaction survey and email marketing software in accordance to the question on the degree of customer data affecting marketing and communications activity. Then, we notice the characteristics presented as medium digitalisation's activities in Image 2, are being partially or not at all implemented. For example, we already know from the digital online image of *Travellook* that it does not own neither a computerized reservation system nor a CRM system.

Moreover, analytics tools and mobile applications are also at low levels of usage, as presented in the answers of the respondents in Graph 2.

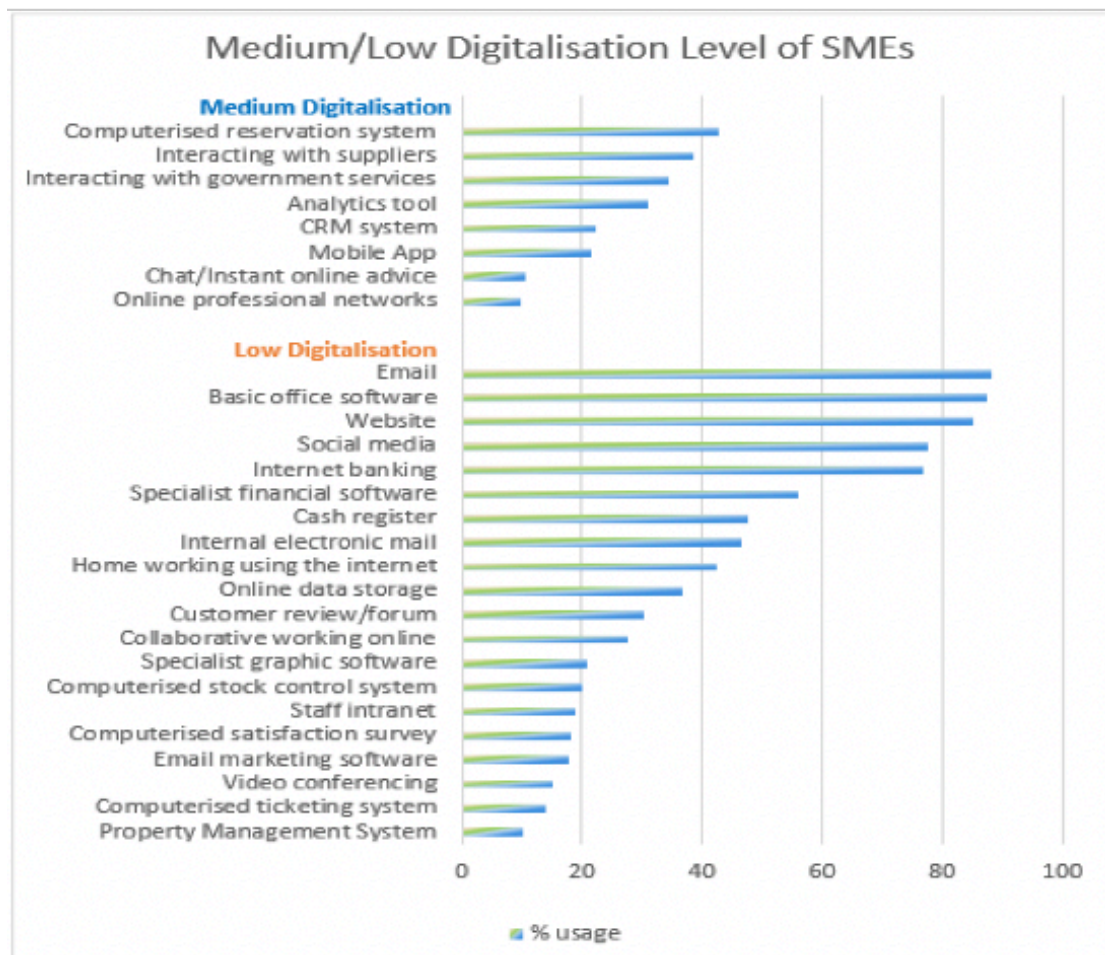


Image 2 SME journey towards digitalization. Adapted from: Digitalization in Tourism: In-depth analysis of challenges and opportunities, by Dredge, D., Phi, G., Mahadevan, R., Meehan, E. & Popescu, 2018, EASME Virtual Tourism Observatory, Copyright 2018 by EASME

The following Image depicts the degrees of digitalization. Taking into consideration that *Travellook* is a Greek SME and that its main operations are run internally along with the low results of the digital maturity questions, we rank the firm at a weak digitalization phase, as it is in a transition process from the level of a traditional operator to the level of becoming an E-business.

Different and customized products, Open Marketing Channels, leveraging feedback mechanisms to enhance the presence of the market, increase the operational efficiency and open the innovative capacity of SME, can be the key factors at e-Business level in SMEs and in digitalization (Dredge *et al.*, 2018). Moreover, a business that is low digitalized uses digital tools that help the basic internal operations along with the daily

running of the SME, while a medium digitalized company is using digital tools and practices that enhance not only the SME efficiency, but also the linkage to its value chain. Analysis showed that small and medium-sized companies characterized by low digitalization are more interested in applying digital technologies to boost retention of customers, streamline inner procedures and enhance service quality (Dredge *et al.*, 2018). Medium digitized companies were considerably more concerned in digitalization initiatives with global company expansion reach. The questionnaire's results indicate that regarding the all above factors of an E-business, *Travellook* took small steps as investments in social networks, in cloud-computing, in mobile technologies and applications, in data storage and in open source technologies are either low or not active at all.

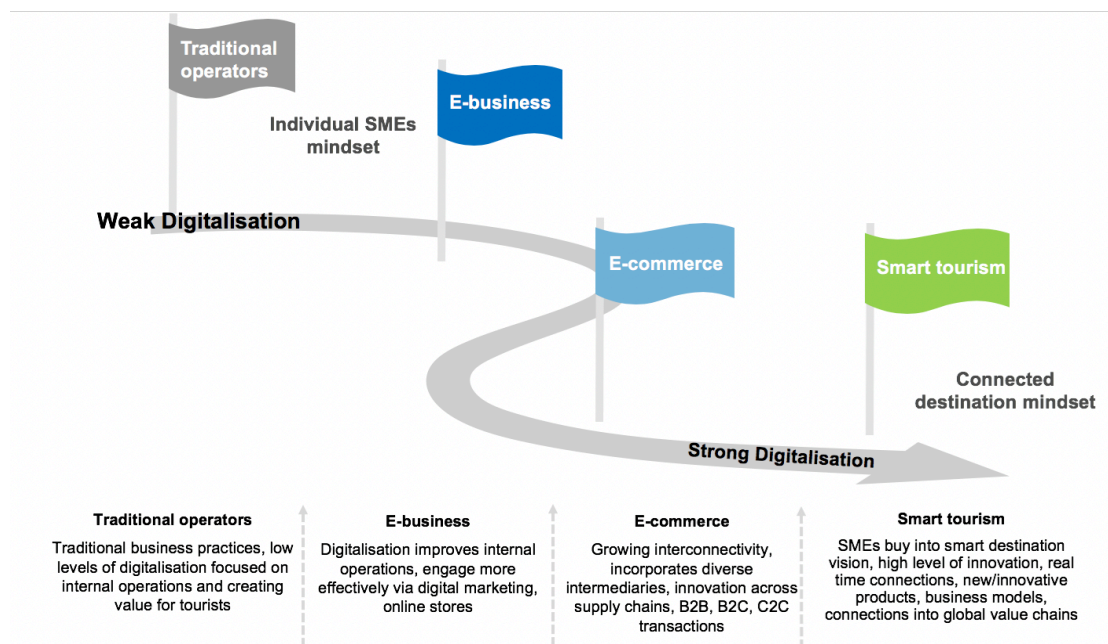


Image 3. SME journey towards digitalization. Adapted from: Digitalization in Tourism: In-depth analysis of challenges and opportunities, by Dredge, D., Phi, G., Mahadevan, R., Meehan, E. & Popescu, 2018, EASME Virtual Tourism Observatory, Copyright 2018 by EASME

### 5.3 Interview Guide Design

The findings of the questionnaire and specifically certain answers of two respondents regarding the questions *Please state at least two reasons why Travellook should invest in new technologies, What do you think should be changed to make it easier for you to*

*work?, What do you think should be changed to improve the quality of service you offer?*, generated interesting facts that require further research and that is the reason why we proceeded to interviewing them. Within the advantages of the interview as a data collection method belongs the likelihood of collecting valuable findings as part of an in-depth analysis of the research problem. In the questionnaire we requested to define at least two main reasons why it is important to invest in new technologies. Their answers entailed the need for customization that meets customer needs and reduces operation time as well as the need for competitive online experience. The aim of the interview is to define better their needs. The interview was performed directly via a scheduled meeting on the 15<sup>th</sup> of May. The interview was held in a semi-structured way with open-end questions and evolved in a conversation, where the respondents were able to answer freely and to provide us with a big amount of information. We decided to divide the interview into two parts in order to explore better each of the two issues that were raised within the answers of the questionnaire. We recorded the answers in order to build our case. First, the interviewees are asked to say a few things about themselves including personal and business criteria. Then, they are inquired to summarize the qualifications required in order to offer a good travel service and how they believe they could identify customers' profiles and special requirements. In the second part of the interview, interviewees are asked to comment on the current online travel situation concerning competitors and stimuli as well as on their ways of handling customer support. The results are analyzed in the following sections of the research.

Important facts about the Interview:

- The interview was conducted in the participants' mother tongue ; Greek. The argument was that the people interviewed could talk more effortlessly and could feel more confident.
- The qualitative data are the consequence of translations of the transcripts from Greek to English. This contained the danger of partiality, but was inevitable because the report was written in English.

Interviewee	Role in the Company	Years of employment in the company
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A	Travel Consultant	7 years
B	Travel Consultant	12 years

## **5.4 Analysis & Results**

### **5.4.1 Exploring customization of customer needs**

Interviewee A has a twelve year experience in the tourism field and since he finished his studies in tourism management, he has been working as a travel consultant. His statement emphasizes on the need of travel agents to have a holistic view when offering a travel service and that means including the expertise in the application domain (hotels, airline companies and car rentals) as well as the flexibility to adjust to special wishes and desires of their clientele. If he can't find the right guidelines to explain or advise the customer, he or she must acquire the required understanding from the consumer profile. He mentions that customers leave tracks in their customer journey, but he doesn't know how technology can help him identify those tracks. Interviewee B has been working as a travel consultant for 17 years and has also finished Tourism Management. She claims that one of the most important factors that signifies a good service is, besides the knowledge and the flexibility required, the trust that is being gained and developed between them. She says, that this is the reason why they can still compete with the online travel platforms. She claims that there is a big amount of clients that prefer to pay for a tailor-made travel package produced by an agent rather than to follow the do-it-yourself concept. She confirms the sayings of Interviewee A and she adds up her difficulty in retrieving the right information from the vast amount of available travel products when it comes in creating custom-made packages. Finally, she wants to know if there is a fast way that can help her recognize beforehand some indicators that will help her recommend to her clients new travel products and packages that match their preferences.

### **5.4.2 Exploring Online Experience**

Interviewee A confirms that nowadays online travel agencies and distributors continue to increase much rapidly and consumers are constantly online, are getting influenced and often proceed to online reservations. He mentions that online travel packages produced by travel organizations, online travel agencies and online travel communities



as well as the accompanied online marketing is a trend but he believes in a potential coexistence of brick and mortar and online travel agencies in the future. Concretely, he says that the agency needs to gain a competitive advantage when it comes in offering an online experience that goes beyond selling online. He admits that TA's online practices are not advanced and that there are still a lot to implement and to learn. Moreover, he emphasizes on the need to reconstruct the website in a way that it will mirror each of their customer's profiles and requirements. He continues saying that because of their specialty and the unpredictable outcomes of a journey, they need to be 24/7 on call, not only in order to provide solutions and help but also to satisfy demanding customers and requests. This situation causes sometimes stress and he would like to know if there could be somehow an automated 24/7 support centre that could filter the requests and potentially could provide instant solutions to certain problems. Interviewee B adds that this possible solution will enhance also the client's online experience. Within this framework she mentions that it has fallen into her attention that there is an accelerating infusion of 360 virtual tours and travel videos containing the real experience. She reveals that within the last year, while offering a travel product, she had many requests from her clients regarding virtual tours. Her clients expressed their need to have a better sense of where they go and what they buy. Finally, she states that it would be very helpful if they could satisfy those requests, as part of their service.

## **6. Overall Assessment and Suggestions**

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The interview generated interesting problematics that have to do with advanced means of technology and can drive real value to both employees and clients within the travel agency of our case study. We identify that the requirements referred from the interviewees are correlated to Artificial Intelligence (AI) applications. We decided to research further on the available new technologies that could be implemented in order to address those issues. Concretely, in our next chapter we introduce the innovation technologies as a whole and we concentrate on certain recommendations that could satisfy their needs.

### **6.1 New Technologies and Innovation**

The travel industry is experiencing a transformative change regarding advanced technologies and innovation. An artificial intelligence immersion has caused new ways of interaction in businesses. Travel brands are focused on satisfying the ever more accelerating travel trend and the accompanied high demands of the traveller. AI enables machines to imitate intelligence behaviour and to perform human-like tasks. Every AI application is referred as key technology for the 21<sup>st</sup> century (Viola, 2018) and it applies in facilitating human needs and in upgrading business's technology infrastructure in order to serve those needs. With the emerge of intense connectivity and computing, there is greater need in delving into customer knowledge. Big data offers today the opportunity to have insight to unrevealed significant client information and correlations but with the assistance of AI the knowledge that is produced, is even more deepened, detailed and explicit (Economist, 2016).

Machine learning systems, such as problem solving and recommender systems, natural language recognition and speech production as well as neural networks are some examples that are applicable in the travel industry. AI features from augmented and virtual reality and virtual assistants to the Internet Of Things (IoT) are connected to devices and applications and it is in the hands of the travel brands, which to choose and implement in order to drive real value (Weissenberg, 2017). In parallel, the adoption of this innovative technology from a travel company can boost its productivity and

efficiency, whilst there aren't yet a lot of companies that can invest or utilize it, because it requires great financial resources and know-how.

### **6.1.1 Semantic Technologies**

Among the innovative technologies that potentially *Travellook* could integrate, is the semantic web, by which machines can easily sort and interpret data with the intention of performing tasks that used to be handled manually or even haven't ever been performed because it was impossible. Their actualization though can be greatly beneficial to the company. Concretely, the semantic web allows machines to discover, read and correlate data from any available network in order to satisfy request given by humans (Hopping, 2018). Dynamic Packaging is a feature empowered by the semantic web that can offer dynamic combinations of travel products. TAs need to take care the needs of their clients and with the high demand for customization of the products to each individual's requirements, tour operators and travel agencies search for ways to dynamically and automatically create tailor-made packages. Real-world semantic based applications can provide the flexibility to generate dynamic packages from a vast amount of alternatives as well as the convenience to avoid the complexity of contract rules and pricing issues (Cardoso, 2006).

### **6.1.2 Machine Learning systems**

As an AI discipline, machine learning is based on algorithms and their ability to analyse data, to obtain knowledge from them and to end up to a conclusion or a prediction that can automatically get changed and improved. Specifically, common applications of machine learning systems and data science in the tourism industry are the recommendations engines, which utilize big or any other data and provide the user with recommendations that are based on their personal preferences. A recommender system offers help, when it comes in pointing out which are the options that match in a concrete situation and for a concrete person. In parallel, such a system can assist the individual in a complicated decision-making process by indicating better customer requirements as well as by proceeding in correlations of those with other consumers and their preferences (Buhalis and Law, 2008). When consumers seek travel recommendations, they often contact their Travel Agents, because there is acknowledged reliability and

trust. With the internet penetration though, along with the influencers and the countless travel information as well as the posts from the friendly environment, the consumer gets influenced yet that doesn't guarantee always trustworthiness. As a result, a recommender algorithm can increase customer loyalty and satisfaction and strengthen user's confidence, because it combines and correlates data like travel history, location, personal interests, feedback from peers together with trust in peers that drive to powerful recommendations (Hinze and Quan, 2009). In this context, *Travellook* could implement a recommendation tool that can offer more accurate and higher quality recommendations. In this context, *Travellook* can combine the technical knowledge produced from the algorithm with the human knowledge owned by its personnel.

### **6.1.3 Chatbots and Virtual Agents**

Among other AI features stand Chatbots and Virtual Assistants that as innovative computer generated systems are embedded into business practices set to reconstruct consumer experience. A chatbot is a text-based AI program imitating human conversational behaviour with its software being inspired by the neural nodes of the human brain that after certain modifications can be used in a wide range of sectors serving different purposes (Frankenfield, 2018). According to a definition given by Techopedia, modern chatbots are usually used for customer service support by responding to simple conversations regarding queries on products, services or company policies and are being frequently seen in social platforms and websites. Virtual Assistants seem to have great resemblance to bots but their software is more advanced as they can serve as real- world Travel Agents. Virtual agents can react through Natural Language Processing (NLP) techniques to voice-driven responses, handle complicated interactions while through machine learning techniques they can predict preferences, update their memory (Argal, A., Gupta, S., Modi, A., Pandey, P., Shim, S., & Choo, 2018) or even remind and handle business tasks. Virtual Agents can process personal data, learn the preferences of the traveller more accurately, search alternatives and present custom-made recommendations such as new destinations or routes (Mackie, 2016).

#### **6.1.4 Virtual Reality**

Taking into consideration the latest technological advancements, there is also great chance of implementing new innovation technology features in a website, such as augmented reality and virtual reality. Therefore, real visits can be simulated by the experience in a computer-mediated environment and virtual experience can provide almost real life experiences that can communicate destination images. (Cho, Y., Wang, Y., & Fesenmaier, 2002). Hence, virtual reality can function as an inspirational trigger that could reshape purchase behaviours in the travel industry by bringing “try before you buy” to the market, while its usage could concentrate a vast amount of data that can enrich even more the knowledge of the gatekeepers, i.e. Google, Facebook (Mackie, 2016).

## 7. Discussion

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The last decade has seen rapid growth in research into the fields of digital inclusion and literacy. Our theoretical framework highlighted the significance of digital transformation regarding TAs as it is a vital reason for continuing their existence. This challenging environment affects especially the role of travel agencies, because on the one hand the evolution in electronic distribution signifies the gradual elimination of intermediaries and on the other hand the available aggregators offer online a great range of combined services and products. The most important impact is detected in the relationship between the firm and the technological infrastructure with Information and Communication Technologies (ICT) as well as the high online content proliferation to shape a new era of activities within a travel company.

The purpose of this chapter is to present a discussion about the barriers and the correlated requirements that arise within the digital transformation process. We found that the manager and the employees understand essentially that ICT can boost organizational efficiency and can improve customer experience. Moreover, we suggested applicable advanced technologies that can address some of the challenges presented in the interviews and can change the future of the industry as a whole. Nevertheless, followingly we discuss the barriers and requirements in order to proceed to the implementation of all the above that are summarized in the concepts of organizational readiness and that of managerial implications.

### 7.1 Organizational Readiness

Companies are trying to stay competitive in a progressively dynamic environment, where there is always the need to adapt and implement new strategies and processes, to adjust to advanced technologies and to accommodate correspondingly business requirements. Organizational readiness implies the degree of willingness and intention for change as well as the capacity of a company that will effectively and successfully manage those changes. When organizations want to preserve their competitive advantage and in the case of a TA to take steps towards their digital transformation, there is always investment both in money and time (Luke Bujarski, 2017). Specifically, the urgency for automation of processes, delivery of personalized services and

digitalization of experiences requires resources and strategical planning in order to have qualitative results. A TA must collect all available data both from front-end and back-end systems and come to a 360-view of the company and the customer and finally to apply in a cost-effective and responsible way the changes that are to be made. Moreover, within the context of organizational readiness belong the need for redefinition of the actual travel products of the TAs. Currently, the majority of travel organizations have physical premises, comparatively static line products and long-term relations with providers through the use of computer reservation systems and these fixed features do not seem to satisfy future requirements (Barnett and Standing, 2001).

## **7.2 Managerial Implications**

Digital transformation generally brings new practices, new processes to organizations, and even new business models or structural changes. It involves cultivating new skills, developing new ways of thinking so much as changing attitudes towards their work. Furthermore, the way these skills and knowledge are acquired before all else, often depends upon a change, as traditional aged methods prove inadequate to counter the speed of transition. Having as a fact that the tourism industry is service-oriented, a big amount of managers and staff have insufficient knowledge of ICT. However, in order to stay competitive, practitioners should explore the potentials of IT and proactively identify technological capacity (Law, Leung and Buhalis, 2009). In order to succeed in that, managers should support the development of adequate training plans to provide employees with new digital skills. Such training plans can enable the firm not only to recognize inefficiencies and necessities in existing and future skills, but also to examine the range of choices for resolving this chasm. Some of the solutions include recruiting external talent, outsourcing, e-learning, pooling resources and sharing the cost of training with similar training needs among SMEs (Dredge *et al.*, 2018). The problem is that although the focus is growing on IT use, many managers are still hesitant to integrate IT into decision-making procedures.

## 8. Conclusion

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In our research we concluded that e-business applications are an essential step for the continuance of travel agencies. Our theoretical framework has shown trends which strengthen the hypothesis that from the ending of the previous century there has been an inrush of emerging technologies that support an ever accelerating transformative perpetuation in the travel sector. In order to retain their authority position, TAs need to invest in ICTs that can redefine internal procedures and customer involvement. In the field of digital economy, the market concentrates progressively on individually tailored experiences, which give each person a real value. In parallel, all the emerging innovative technologies are supporting this customer centric approach in order to add up even more value. The value generated by the client's participation in all phases of the customer journey has an important effect on client's retention and loyalty and this can be implemented both in the online and offline practices of a TA. Offline relationships create confidence, generate faster connections, cooperation, whereas online relationships are capable of collecting information that are excessively important to the business development as they assist in the enhancement of the service provided and the boost of the offline relationships.

The major objective of this study was to explore the applicable technologies in a travel agency that can contribute to its development and continuance. A significant condition for the digital transformation of a TA is the high level of digital maturity and literacy as it is a decisive factor for financial investments in ICTs. This is the reason why we measured its digitalization level. The outcome of our investigation indicated the weak digitalization of Travellook. This highlights the difficulty in adjusting to the ever more changeable technological environment. However, the outcome of the study does not concern the whole industry as the data submitted concern only one case. Moreover, all the recommended innovative technologies are based on the needs of the firm regarding customization and online experience, but because of their advanced nature, they are not frequently seen in businesses and particularly in travel agencies. Hence, the relationship between innovative technologies and travel agencies could be the base for future researches.





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## 10. Appendix

---

\* Απαιτείται

Ποιος είναι ο τίτλος εργασίας  
σας στην εταιρία "Travelllook"; \*

Η απάντησή σας

---

Σε τι επίπεδο πιστεύετε ότι  
βρίσκεστε σχετικά με τις  
ψηφιακές δεξιότητες ; \*

☐ Χαμηλό

☐ Μέτριο

☐ Υψηλό



Image 3

Πιστεύετε ότι η επιχειρηματική  
στρατηγική της εταιρίας συμφωνεί  
με την ψηφιακή στρατηγική της;

\*

☐ Ναι

☐ Όχι

...

Σε τι βαθμό πιστεύετε ότι η εταιρία  
χρειάζεται ψηφιακό  
μετασχηματισμό;

\*

1

2

3

4

5



Μετά την  
ενότητα 1

Συνέχεια στην επόμενη ενότητα



Image 4





## Εμπειρία Χρήστη

Σε τι βαθμό νομίζετε πως οι παρακάτω δηλώσεις εφαρμόζονται στην εταιρία;



Η αλληλεπίδραση με τους πελάτες γίνεται μέσω παραδοσιακών και ψηφιακών καναλιών.



1

2

3

4

5



Εξατομικεύουμε την επικοινωνία του ψηφιακού πελάτη μας (π.χ. σε σχέση με το περιεχόμενο και τη συχνότητα) ανάλογα με τη συμπεριφορά των πελατών και τα τρέχοντα δεδομένα.



Συγκεντρώνουμε δεδομένα  
πελατών και αλληλεπιδράσεων από  
διάφορα κανάλια.

\*

1 2 3 4 5



⋮

Παίρνουμε ιδέες από τα δεδομένα  
των πελατών και των  
αλληλεπιδράσεων που επηρεάζουν  
το μάρκετινγκ και την  
επικοινωνιακή μας δραστηριότητα.

\*

1 2 3 4 5



## Διαδουκτιακή ωριμότητα

Όσον αφορά την υπάρχουσα στρατηγική του οργανισμού σας, σε ποιο βαθμό κάνετε τα παρακάτω για να υποστηρίξετε τον ψηφιακό μετασχηματισμό της επιχείρησής σας;

Επενδύσεις στη χρήση κοινωνικών δικτύων. \*

1 2 3 4 5

☐ ☐ ☐ ☐ ☐

Αύξηση των επενδύσεων στην υποδομή υπολογιστικού νέφους (cloud computing) \*

1 2 3 4 5

☐ ☐ ☐ ☐ ☐

Επενδύσεις σε εφαρμογές και τεχνολογίες κινητών.

\*

1 2 3 4 5

☐ ☐ ☐ ☐ ☐

⋮

Μελέτη αναλυτικών δεδομένων (Google analytics) για τη λήψη αποφάσεων.

\*

1 2 3 4 5

☐ ☐ ☐ ☐ ☐

Επενδύσεις στην αποθήκευση δεδομένων.

\*

1 2 3 4 5

☐ ☐ ☐ ☐ ☐

Image 8

Αναφέρετε τουλάχιστον δύο λόγους \*  
για τους οποίους το "Travelllook"  
πρέπει να επενδύσει σε νέες  
τεχνολογίες.

Κείμενο μακροσκελούς απάντησης

...

Τι θεωρείτε πως πρέπει να αλλάξει \*  
ώστε να διευκολυνθεί η εργασία  
σας;

Κείμενο μακροσκελούς απάντησης

Τι θεωρείτε πως πρέπει να αλλάξει \*  
ώστε να βελτιωθεί η ποιότητα της  
υπηρεσίας που προσφέρετε;

Κείμενο μακροσκελούς απάντησης

Job Description	Level of digital skills	Do you believe that the firm's business strategy is aligned to its digital strategy?
General Manager	Low	No
Financial Manager	Medium	No
Travel Consultant	Medium	No
Travel Consultant	Low	No
Travel Consultant	High	No
Travel Consultant	Medium	No
Digital Manager	High	Yes
Sales Manager	Low	No

Image 10

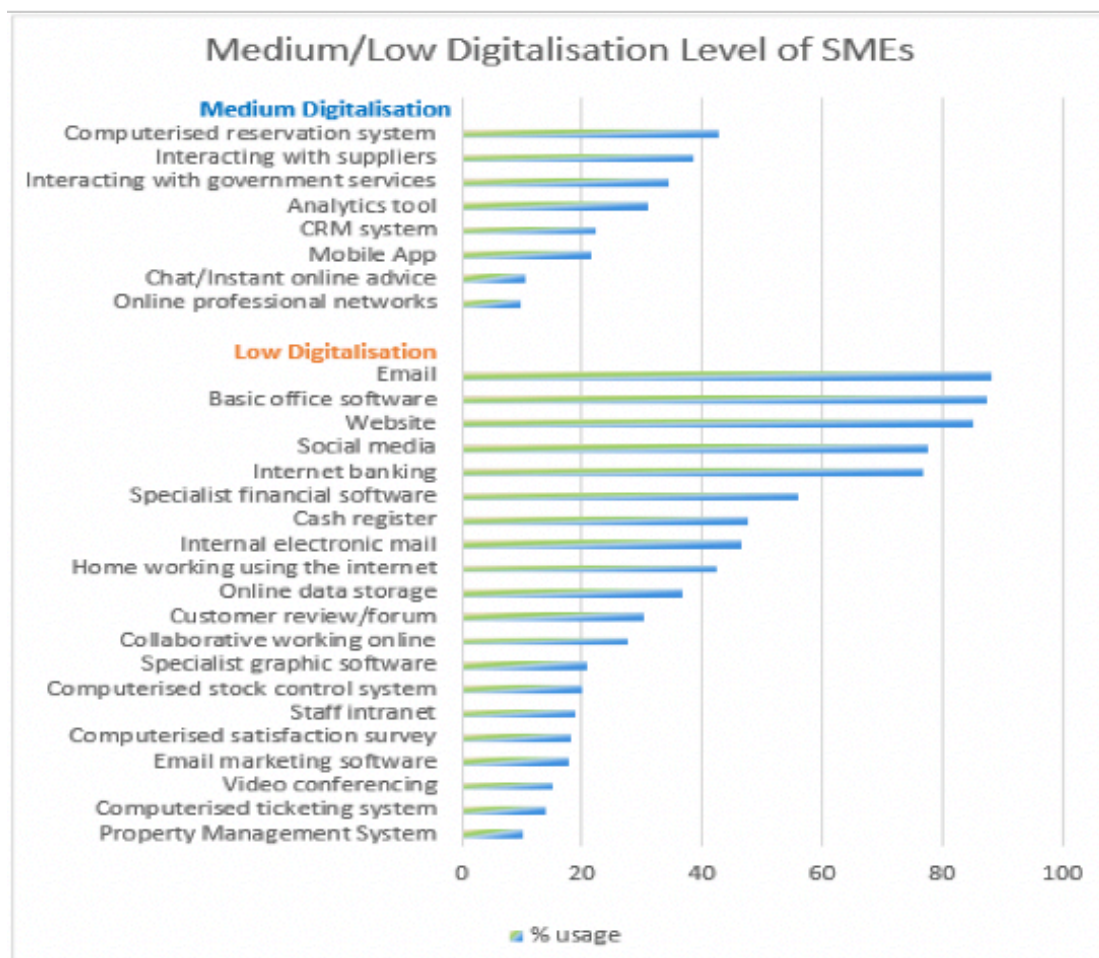


Image 11 SME journey towards digitalization. Adapted from: Digitalization in Tourism: In-depth analysis of challenges and opportunities, by Dredge, D., Phi, G., Mahadevan, R., Meehan, E. & Popescu, 2018, EASME Virtual Tourism Observatory, Copyright 2018 by EASME

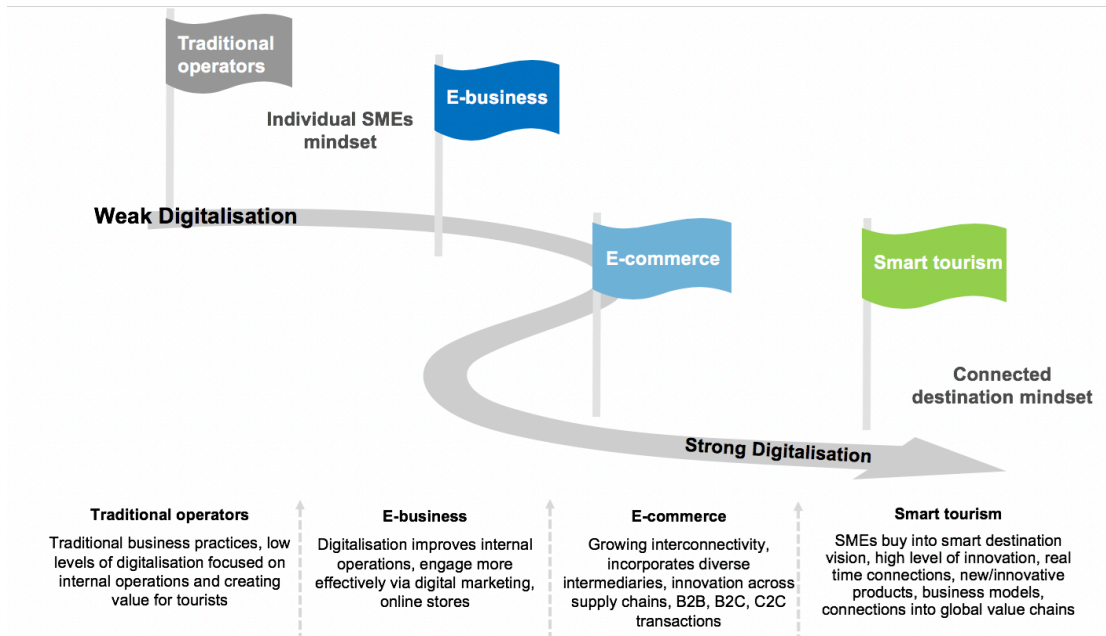
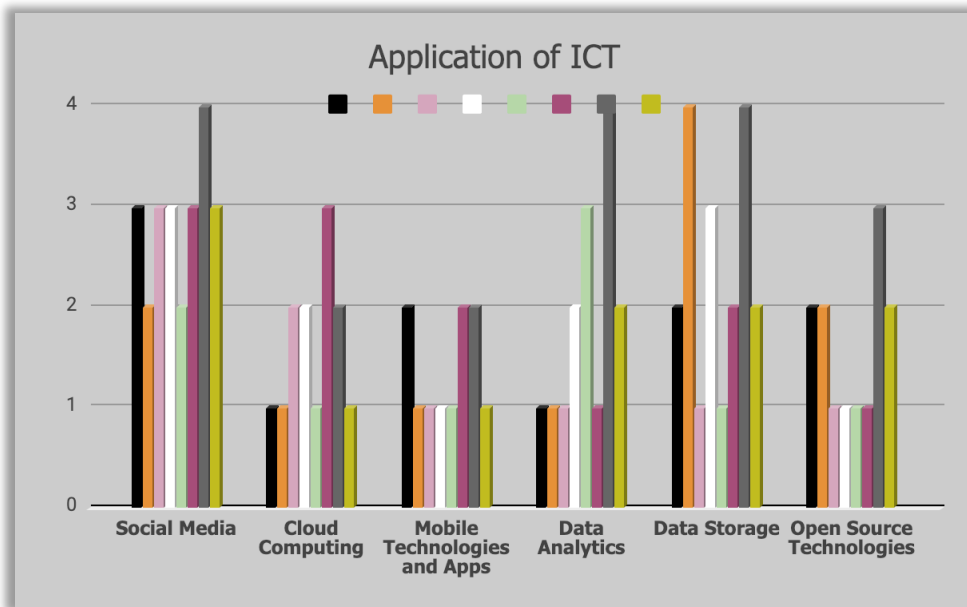


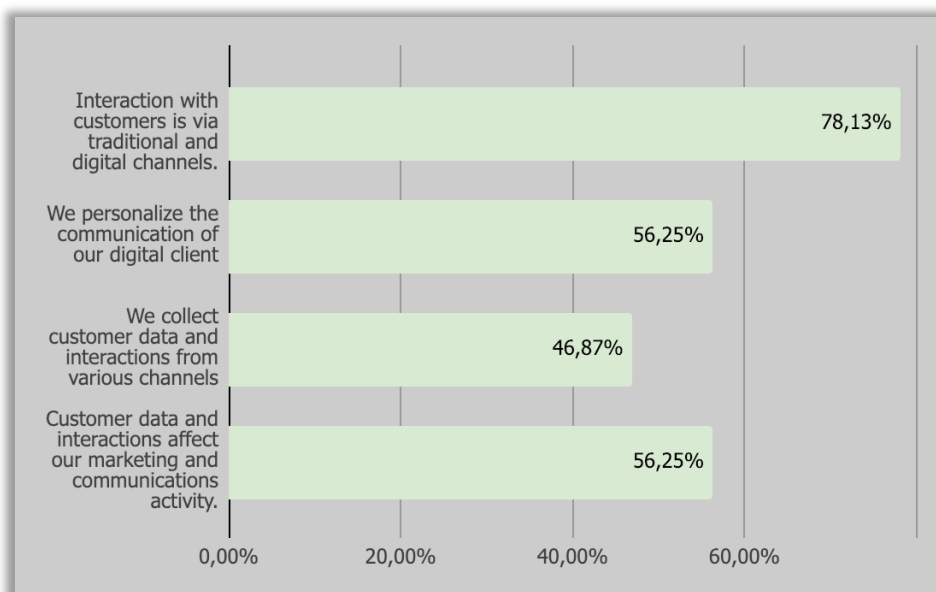
Image 12 SME journey towards digitalization. Adapted from: Digitalization in Tourism: In-depth analysis of challenges and opportunities, by Dredge, D., Phi, G., Mahadevan, R., Meehan, E. & Popescu, 2018, EASME Virtual Tourism Observatory, Copyright 2018 by EASME



Graph 4



Graph 5



Graph 6