Articles and essays

Mobile Technology in the Management of Tourist Activities in Aracaju, SE, Brazil

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Abstract

This study discusses the increasing influence of mobile technologies in the management of tourism companies by public managers and tourism suppliers' perspectives in Aracaju, capital of the state of Sergipe. Technology has modified society and, consequently, its economy. In the tourist field, it has improved the potential of destinations through promotion and marketing, shortened distances, and catalyzed knowledge in a fast and competitive way. The literature review is constituted of subjects such as tourism management, governance, and mobile technology. In this context, the data collection process was conducted by means of a specific form with five objective questions applied to public managers and tourist service providers in order to evaluate the intervention of mobile technologies in the company's governance and management. Five tourism provider groups from Aracaju constitute the field research: lodging facilities, travel agencies, car rental companies, and state and municipal management. Statistical analysis showed that the use of mobile technology leads to transformations in tourism governance and management, thus being a relevant tool that facilitates, intermediates and accelerates decision-making and the strategy process, hence bringing tourists closer to the tourist offer, as well as solving everyday business needs.

Keywords: Tourism governance; Technology; Mobile technology; Aracaju/SE.

Resumo

Tecnologia móvel na gestão de atividades turísticas em Aracaju, SE, Brasil

O objetivo deste estudo é discutir a influência crescente das tecnologias móveis na gestão das empresas de turismo, tendo como referência empírica as perspectivas de gestores públicos e fornecedores turísticos da cidade de Aracaju, capital do estado de Sergipe, Brasil. A tecnologia modifica a sociedade e consequentemente a sua economia. Na relação com o turismo, possui a importância de oportunizar o avanço da destinação por meio da promoção e comercialização, encurtar distâncias e catalisar o conhecimento de forma rápida e competitiva. Mediante revisão de literatura acerca das temáticas "gestão e governança turística", "tecnologia" e "tecnologia móvel", deu-se o processo da coleta de dados por meio de um formulário específico com cinco perguntas objetivas para gestores públicos e prestadores de serviços do turismo, visando avaliar a intervenção das tecnologias móveis na governança e gestão da atividade de cada empresa. Participaram da pesquisa de campo cinco grupos de prestadores de serviços do turismo de Aracaju:

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meios de hospedagens, agências de viagens, locadoras de veículos e gestão pública estadual e municipal. A análise estatística das respostas ao formulário permitiu concluir que o uso da tecnologia móvel ocasiona transformações na governança e gestão do turismo, sendo assim uma ferramenta intermediária e relevante que facilita e agiliza as tomadas de decisões e estratégias de atuação para aproximar o turista dos produtos e serviços turísticos, além de resolver necessidades pessoais e empresariais do dia a dia.
Palavras-chave: Governança turística; Tecnologia; Tecnologia móvel; Aracaju/SE.

Resumen

Tecnología móvil en la gestión de actividades turísticas en Aracaju, SE, Brasil

El objetivo de este estudio es discutir la influencia creciente de las tecnologías móviles en la gestión de las compañías de turismo, teniendo como referencia empírica las perspectivas de gestores públicos y proveedores turísticos de la ciudad de Aracaju, capital de Sergipe (Brasil). La tecnología modifica la sociedad y, consecuentemente, su economía. En la relación con el turismo, es importante por posibilitar el avance del destino por medio de la promoción y comercialización, acortar distancias y catalizar el conocimiento de forma rápida y competitiva. A partir de la revisión de literatura acerca de las temáticas "gestión y gobernanza turística", "tecnología" y "tecnología móvil", se realizó el proceso de la recolección de datos por medio de un formulario específico con cinco preguntas objetivas a gestores públicos y a prestadores de servicios del turismo para evaluar la intervención de las tecnologías móviles en la gobernanza y gestión de la actividad de cada compañía. Participaron en la investigación de campo cinco grupos de prestadores de servicios del turismo de Aracaju: medios de hospedaje, agencias de viajes, arrendadoras de vehículos y gestión pública estadual y municipal. El análisis estadístico de las respuestas al formulario permitió concluir que el uso de la tecnología móvil ocasiona transformaciones en la gobernanza y la gestión del turismo, siendo una herramienta intermedia y relevante que facilita y agiliza las tomas de decisiones y las estrategias para acercar los productos y servicios turísticos al turista, además de resolver necesidades personales y empresariales cotidianas.
Palabras clave: Gobernanza turística; Tecnología; Tecnología móvil; Aracaju/SE.

INTRODUCTION

Mobility leads to new paradigms and changes human behavior. Society is progressively involved in the ease and access to information at any time and place. With this change in position, professionals from various areas have the need and urgency of adequating and training themselves in order to serve the new client.

It is known that the speed of changes brought by technology, both globally and socially, has an innovative and transformative power. Thus, technology changes society and consequently its economy (Hassan, 2011). We now live in a technological era, responsible for major changes resulting in significant repercussions in the production and management of companies, with new formats, profiles, techniques and hierarchical structures, with more agility, speed and less costs.

The relationship between technology and tourism opens up the opportunity for advances in destination and the impacts caused by the use of technology and innovation in companies and in society–such as shortening distances through the Internet, catalyzing knowledge quickly and competitively, among others factors– they become incalculable and can bring positive returns through promotion and marketing to virtually every part of the world.

Tourism is therefore trying to shape itself into the new digital age in order to maintain its competitiveness in destinations, which involves the provision of services that are capable of technological changes that allow for faster means to attract demand, fostering competitiveness and globalization (Tan, Lee, Lin, & Ooi, 2017).

Technological advance has brought the intense use of mobile technologies (smartphones, tablets, notebooks, GPS) to aid in day to day activities in personal and professional life. The advent of the smartphone has revolutionized and changed society by offering a wealth of features combined in a single device, as well as providing functionalities through a set of applications (apps) that facilitate access to information in order to offer specific activities, both for the solution of increased productivity in the company and as an entertainment service (Hoehle & Venkatesh, 2015). The purpose of apps is to make life easier for users and provide direct, often free access to various services.

Given this scenario, one question emerges: what is the influence of mobile technologies in the management of tourism business companies? This article was designed in order to answer this, having the general objective of discussing the increasing influence of mobile technologies in the management of companies in the tourism sector, having as empirical reference the perspective of public managers and tourism suppliers of the city of Aracaju, capital of the state of Sergipe, Brazil. This study will discuss the use of mobile technology as a tool of productivity and additional value, associated with the process of management and innovation of company activities providing tourism services.

In addition to the Introduction and the Final Considerations, this study presents three moments: literature review on the topics "management", "governance", "technology" and "mobile technology"; field research through the application of forms to public managers and tourism service providers of Aracaju; and, finally, results and discussion.

The main justification for choosing the object of study proposed here is based on its innovative projection for tourism and from the observation of the still incipient discussions about the intervention of mobile technologies in the management of products, services and/or tourist destinations.

In addition, the importance of this subject is associated with the possibility of promoting studies aimed at mobile technologies according to the interests of tourism in the digital and technological age, so that their actions are planned, orderly and innovative, since it is a competitive advantage to follow the pace of technology, in addition to being an efficient opportunity to boost the dissemination of the activities of managers and service providers of tourism due to the positive repercussion of their management.

LITERATURE REVIEW

The transformations resulting from technology remain at a high speed, reshaping patterns, behaviors and increasing progress with respect to the competitiveness levels of tourist destinations. In this scenario, tourism must offer the most adequate infrastructure with service provision and innovative, diversified attractions. To this end, it is essential to understand the performance of public and private management, as well as that of companies

that provide tourist services, especially those that should qualify and ensure the success of tourism.

To follow the paradigm shift, the public management of tourism presents an advance in its form of governance, seeking to share responsibilities, goods and objectives and to include in its management the participation of the private initiative, formed in its majority by service providers in areas of travel agencies, lodging facilities, car rental, bars, and restaurants, among others. Cooper, Hall and Wheat (2011) report that

> in developed countries, many of the State's welfare-oriented activities, including leisure and cultural facilities, are now operated and implemented by private sector companies or non-governmental organizations. Therefore, instead of the implementation of government policies being undertaken by a single government agency, what we see today is a greater emphasis on partnerships. (p. 78)

Governance is a new political model that takes more plural tools to govern as it includes the local community as a protagonist along with private initiative in decision-making. Likewise, governance points to relationships based on trust, reciprocity, transparency and loyalty with interdependence between agents (Rhodes, 1996; Trentin, 2016).

It is important to emphasize that management and governance are terms with different purposes (Brito, 2014; Roth, Wegner, Antunes, & Padula, 2012), but the differences are not so easy to perceive in daily professional practice.

> Governance is responsible for defining the structure of the network, for detailing its organization, for establishing regulatory mechanisms and for the decision-making process, whereas management is in charge of planning, executing and controlling strategies and actions within the limits established by governance. (Roth et al., 2012, p. 120)

Governance responsibility requires autonomy to establish norms, standards, regulations, and operational measures with a group of managers. Management has the role of managerial practice, with the freedom to use knowledge and skills in continuous control and evaluation to achieve collective goals.

According to Pedroso (2012), management is also a social function, having the purpose of making people capable of performing joint action, even when acting independently in each company, but with same purposes. In this case, public managers and providers of tourism services, together, seek training and development of the sector.

Beritelli and Bieger (2014) argue that, in a structural manner, governance associated with management puts into practice processes and mechanisms that help to resolve how and why to do activities through common goals and relations.

Through leadership relationships and interaction with the tourism market, there must be mutual participation in the elaboration of plans and actions that will result in the desired growing path, with the generation of improvements in the efficiency and effectiveness of the management system of each tourism company and for the destination as a whole (Baggio, Scott, & Cooper, 2010).

In tourism, governance must prevail in a decentralized, participatory and transparent manner in public-private relations for the success of tourism planning and management (Svensson, Nordin, & Flagestad, 2005).

Tourism governance can be developed in various socio-economic, environmental and political spheres, through partnerships involving the private initiative and public power to take action that surpasses individual activities, performing the role of organization, mutuality and management in benefit of tourism (Tomio & Schmidt, 2014).

According to González (2014), tourism governance should be represented by the following factors: relation with the new forms of government action for successful management; cooperation and interaction relations between social actors to face the challenges of increasing the competitiveness of a destination or sector; protagonism of the public institutional structure in the beginning of the process of partnership and dialogue with other social agents; guidance to map, select and coordinate specific objectives through collective techniques.

In its operability, tourism governance stipulates procedures that allow joint work between various social agents with public and collective management and development processes, having as tools innovation and technology, since "much more than machines, systems and devices connected between themselves, technology covers the beginning of the idea up to the concretization and delivery of the product or service, going mainly through people" (Bolsoni, 2004, p. 98).

Technology is formed by a set of tools, techniques and processes that, in a fast way, help and transform the continuous evolution of society. In tourism, it provides a number of changes that directly affect both origin and target destinations, mainly with regard to speed of information and the types of services and products offered with the purpose of increasing and innovating the activity. In this sense, it is essential

> to understand the phenomenon of tourism, which also involves understanding the dynamics of technological innovation in this sector, especially since the availability of new technologies has led to the development of new skills, new materials, new services, new businesses, new forms of organization, and a reconfiguration of work itself. (Martins, Fiates, & Pinto, 2016, p. 69)

Technology brings innovation and transformation and requires the agility and expertise of society to follow new forms of production, communication, planning and management. The insertion of tourism into this paradigm is important to modernize and offer its products and services to the new market (Hassan, 2011). Technology changes society and consequently the economy and, in its relationship with tourism, it has gone from a marketing tool to an instrument of knowledge creation. It is worth mentioning that technologies come and go, and there will always be innovation and advances to be made (Xiang, 2017).

The use of technology, in addition to being a support tool for tourism, is inserted in the work function of tourism, resulting in new possibilities of competitive advantage and in an important function in tourism development. This is so because it brings about a significant change in the world context, allowing for the distribution of information and great exposure of localities for all, in order to foster greater competitiveness between destinations and instigate improvement in the services offered, valuing the creativity, innovation and singularity of each attraction and/or tourism product (Nascimento, Maia, & Dias, 2012).

Technology acts as a mechanism for increasing business efficiency, reducing costs and improving services, as well as providing new possibilities for growth, as well as challenges to be faced in pursuit of competitive advantage (Martins et al., 2016). And, as the main activity of tourism is the supply of services, it is susceptible to technological transformations to create different and innovative ways to meet demands and follow competitive market (Hassan, 2011). Buhalis (1998) wrote in his studies on the changes that the use of technology causes on the development of tourism:

> Inevitably, tourism is also affected by the technological revolution. Both tourism desti-nations and companies increasingly need to adopt innovative methods to increase their competitiveness. On the demand side, the new, sophisticated, savvy and demanding consumer becomes increasingly familiar with emerging technologies and requires flexible, specialized, accessible, interactive products, as well as communication with destination managers. This way, new management practices emerge, taking advantage of the revolution to restructure all tourism business processes. (p. 409, our translation)

In general, the technological revolution provides many changes in tourism management—particularly for the planning, marketing, promotion and coordination of service offer activities—in order to keep pace with the rapid evolution of demand and achieve competitive advantage in the market.

Organizations with inert patterns have limited management and bear the loss of market position. For a company to remain with competitive advantage in the market, it is necessary to be sensitive to changes able to face the dynamics of globalization. And these changes must be related to the application of technological strategies, that is, to use the technology with competitive ends by means of resources that provide the best products and services to the market (Ramos, Mendes Filho, & Lobianco, 2017).

The tourism sector resorts to the use of technology in many segments. In their practices, changes are essential for the development of new products, qualification of human resources, ease of communication, improvement of travel experiences in products and services, and customization of the provision of services (Hassan, 2011).

To meet the tourism demand and survive in the long run, there is no choice but to associate technology with supply and improve interactivity with the market (Buhalis, 1998). Companies that implement new technologies are able to face new competitors because, as a result of advance and improvements, they create different kinds of relationship between producers, suppliers and customers, and ways to market their product or service.

MOBILE TECHNOLOGY IN TOURISM

According to Ramos et al. (2017), the growth in the generation of new cellular technologies, previously used only to make calls, but which today serve as a working tool, satellite communication (GPS), wireless local area networks, among other utilities.

> The functionality of the traditional cellphone over the last decade has been pri-marily for calling and text due to its limited technological capabilities. Since the

emergence of smartphones and the advancement of wireless data networks (3G, 4G and wireless), with long-term evolution of the third generation and now the fourth, it is always possible to develop new software. (Tan et al., 2017, p. 560, our translation)

Nowadays, cellphones are increasingly accessible, which lead to the phenomenon called *mobile computing* (Ramos et al., 2017), that is, people have a smartphone with several functionalities for use anywhere. The benefits of "always connected," "always with you", and ease-of-use, regardless of location, help promote efficiency in users' daily tasks (Tan et al., 2017).

The use of smartphones and tablets is a common activity in people's daily lives and more than half the world's population has one of these devices. Because they have an operating system (a platform that allows one to develop, install, and run applications), mobile devices are similar to a hand computer. The corporate market has realized that investing in mobile applications delivers significant results in order to streamline business and boost profits. (Ramos et al., 2017, pp. 133–134)

With the advancement of technology, mobile phones have become smartphones, offering very useful features gathered in a single device, in addition to providing functionality through numerous applications that facilitate speed access to information and resolution of professional and personal situations.

Tablets are computer-like devices, but with the practicality of being portable and have the same operating system as smartphones, being used in many companies, including tourism-related ones, characterized as a working tool of many managers. From the perspective of several companies, mobile technology, through smartphones and tablets, should generate profits, lower costs and increase competitive advantage in the market (Rivera, Croes, & Zhong, 2016).

The corporate market seeks to monitor technological evolution through the use of mobile applications in the company's activities. The aim is to innovate these services with technology, efficiency and agility, incorporating mobile applications into their work systems (Ramos et al., 2017).

Government agencies have begun using mobile applications for strategical communication and disclosure of actions to society. Private companies have already embraced this technological trend for a longer time, targeting sales, negotiation and planning (Noor, Mahmud, Wahidin, & Arshad, 2017).

The changes and advancements generated by the growth of technology in the tourism sector drive the generation of new ways and means of creating, transforming and diffusing tourist products and services through the interconnectivity between people, associated or not with the Internet. Such advances correspond to the creation of several mobile device applications to assist those involved with tourism, tourism supply and/or demand (tourism service providers and/or tourists).

In tourism, the design and use of mobile applications can help a destination in marketing planning, management and promotion, as well as provide information, approach and destination choices (Rivera et al., 2016). Taking the tourist's perception into consideration, the role of technology has evolved in its

applicability as a means of online communication and persuasion that assists in needs and desires (Xiang, 2017).

In recent years, mobile technology has evolved considerably, with devices and operating systems, mainly provided by Apple, Google and Microsoft, increasingly improving. These advances were followed by mobile applications to facilitate the use of conventional systems that were previously only possible through computers (Hoehle & Venkatesh, 2015).

Mobile applications are software developed according to the end user, made with help of a mobile operating system (smartphone) in order to improve the utility of providing users with specific tasks (Dickinson et al., 2014; Tan et al., 2017).

Applications exist due to the advancement of technology for mobile (smartphone) devices, having become a new brand for the advancement of the experimental and operational methodology in the *mobile* field, with the role of job resource and execution of activities that can provide research material, responses and inquires to a large group of participants in real time, integrating the experience of daily work activities transparently (Zhang, Calabrese, Ding, Liu, & Zhang, 2017).

Hoehle and Venkatesh (2015) call mobile applications independent software because their usability does not need to connect to the computer or other equipment and thus does not interfere with the operation of other programs of the cellphone, as well as being designed to work regardless of connection to the internet.

These applications allow users to access a variety of services and features without the need for a web browser, i.e. without surfing the internet (Tan et al., 2017). In addition, they enable smart devices to provide specific mobile services, such as information, access to e-mail, entertainment and professional facilities (Rivera et al., 2016).

To acquire information, to carry out financial transactions or corporate activities, to express opinions or advice related to certain problems, those are actions that can be more efficient and fast through a mobile application, having a more appropriate effect (Noor et al., 2017).

In view of this, the use of new technologies in the case of mobile applications has added value to tourism in that it has its applicability focused on services and/or tourism products, inserting innovative processes in the local/regional development of the activity.

The insertion of applications in tourism is enriching in the planning and management sector by having all the information, plans of action, regiments, norms, procedures, reports, statistics, among other functionalities, in the "palm of the hand", allowing for access from anywhere.

The use of technology can also increase the effectiveness of management, productivity and profitability of tourism organizations, provided that the management attitude is adapted to the new business environment and takes advantage of new opportunities (Buhalis, 1998).

Many touristic destinations have already realized the importance of mobile technology applied to the strategic development of the activity, especially when it is related to information transparency, quick access to documents, communication between various companies, formation of tourist experiences, and interactivity. This shows that tourism managers, be they public or private, are willing to adhere

to mobile technology to add value and increase the competitive position of the product or destination (Rivera et al., 2016).

Mobile applications have been included in several fields, including commerce, health, marketing, transportation, finance, services and entertainment (Noor et al., 2017). Mention of the fields of services and entertainment can remind of the tourism field, which already has many applications developed to assist the tourist before and during their stay somewhere. But, in addition to being advantageous to demand, so is it to supply, as it can be inserted into its activities of planning, management, strategies, control, operations and evaluation, becoming a work tool suitable to the development of the activity.

The strategic use of technology enables the realization of intra-organizational processes, supporting a certain level of integration between various functions within organizations. The goal is to increase efficiency and productivity, as well as improve strategic and operational management of the company. Examples in a tourism organization include planning and management systems, operational control, management functions, demand research, action plans, reports, among others (Buhalis, 1998).

Several useful applications are available in tourism, supporting inter- and intra-organizational functions. This often strengthens the joint efforts of different business managers in the pursuit of a common goal, as well as the horizontal, vertical or diagonal integration of all those involved in tourism development (Buhalis, 1998).

In short, technology can help new forms of management achieve competitive advantage, improve production performance, increase information flow and boost growth with new business.

METHODOLOGY

The choice of studying technology and tourism governance is directly associated with innovation and new perspectives for the development of tourism in a given destination, as well as presenting the intervention of transformations that mobile technologies cause in the use perspective of public managers and providers of tourist services.

Therefore, the characteristics of qualitative research are thought to be more appropriate to begin the methodology in this study, associated to the data collection regarding the use of mobile technologies and their involvement in the execution of tourist activities, as well as the understanding and analysis of certain behaviors, opinions and perspectives of the use of this tool.

According to Godoy (1995), qualitative research has a recognized place among the various possibilities of studying the phenomena that involve human beings, their attitudes and relations with various environments, and the handling of working instruments. This understanding emphasizes that qualitative research seeks to understand people's actions, experiences and behaviors in the face of society, being the fundamental human element for its completion (Gil, 2008).

The techniques used to develop this study were the following: bibliographical research and field research (*in loco*). For the latter, the form was used as data

collection instrument in order to assist in the results and discussions on the use of mobile technologies by public managers and tourist suppliers.

According to Marconi and Lakatos (2003), the form is one of the most used resources in social research, in which the data collection procedure consists of obtaining information directly from the interviewee, that is, its main characteristic is face-to-face contact between researcher and informant, in addition to the questionnaire to be completed by the interviewer, at the time of the interview.

Bibliographic research, also called secondary source research, includes all theoretical references already published in relation to the subject studied. With it, the researcher has direct contact with what was written, said or filmed on a certain subject (Marconi & Lakatos, 2003; Gil, 2008). It is grounded on books, academic studies (dissertations and theses), scientific articles and references in electronic media, particularly in the Portal de Periódicos of the Coordination for the Improvement of Higher Education Personnel (Capes). We highlight the following authors who discuss tourism management and governance: Rhodes (1996); Svensson, Nordin and Flagestad (2005); Baggio, Scott and Cooper (2010); Cooper, Hall and Trigo (2011); Brito (2014); Beritelli and Bieger (2014); Tomio and Schmidt (2014); González (2014); Trentin (2016).

Another topic addressed in the study is technology in tourism, specifically *mobile* devices, in tourism governance and management. Regarding the subject, discussions are still incipient, with the present study being an academic contribution to join the following authors: Dickinson et al. (2014); Hoehle and Venkatesh (2015); Rivera et al. (2016); Ramos et al. (2017); Noor et al. (2017); Tan et al. (2017); Xiang (2017) and Zhang et al. (2017).

The field research was carried out in Aracaju from November 2017 to April 2018 (six months), leaving the professionals at ease, with enough time and attention to respond to the form, despite the application occurring in high season period, with the beginning of holidays at the end of the year and extended holidays such as New Year's Eve, Carnival, Easter and Tiradentes.

In order to define the main sample, the data available at Cadastur[1] through the reports of the last quarter of 2017 were used to quantify the total lodging means and total travel agencies of Aracaju, thus determining the sample to carry out the research form (Table 1).

Table 1 – Total lodging means and travel agencies in Sergipe and Aracaju

Activity	Sergipe A	Aracaju B	% B*100/A
Lodging means	38	26	68.4
Travel Agency	200	153	76.5

Source – Adapted from the Ministry of Tourism (2016)

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1. Compulsory registration of natural and legal persons that work in tourism according to the laws 8,623/1993 and 11,771/2008. Conducted by the Ministry of Tourism (MTur) together with the official tourist agencies in the 26 states of Brazil and the Federal District, with the purpose of facilitating the organization, formalization and legalization of tourism service providers in Brazil, by means of a registry of companies and professionals of the sector (Ministry of Tourism, 2016).

According to Table 1, the number of the two types of tourism service providers is significant in the capital city of Sergipe, mainly because it is an inductive destination, one that has basic infrastructure and tourism with attractive offerings, characterizing itself as the receiving and/or distributor of tourist flows. That is, it is a destination capable of attracting and/or distributing a significant number of tourists to its surroundings in order to boost the economy of the territory in which they are inserted (Barbosa, 2008), where most of the infrastructure and equipment for tourism is concentrated, another reason that justifies conducting field research in the capital, due to the representativeness of service providers.

The other service providers included in the sample are ten operating car rental companies found at the airport of Santa Maria and on the internet, randomly defined, and public tourism managers, with one being representative of the municipal sphere and another being representative of the state.

According to these figures, the total population of the survey is 191 tourism service providers, but to accurately calculate the number of forms that would be applied, the application software Raosoft (2004) was used with a margin of error of 7% and level of confidence of 90%, totaling 81 research forms for public managers and service providers of the various tourism activities (Table 2).

Table 2 – Number of forms applied in Aracaju

Activity	Absolute numbers	%
Lodging means	19	23.4
Travel agency	50	61.8
Vehicle rental	10	12.4
Tourism department of the state	1	1.2
Tourism Department of the municipality	1	1.2
TOTAL	81	100

Source – Prepared by the authors, 2018

The forms were elaborated with five objective questions—in order to facilitate their filling for later compilation and analysis of the data—, whose contents were about the use and influence of mobile technologies for the management and development of activities in the company, the functionality of its website for mobile technologies and influences of social networks (Facebook and Instagram) in its management.

RESULTS AND DISCUSSION

After compiling the data, the survey revealed that 100% of respondents use some mobile technology for the management and development of activities in the workplace for corporate use. In addition, 86% of them use the smartphone and 14% the tablet for this purpose. This behavior directly demonstrates a relationship with the theory addressed, since mobile technology is constantly growing in use day by day, for both personal and professional activities.

Respondents, when answering this question, informed that the tool is of essential use for decision making, with answers and/or immediate solutions, in addition to helping in the quick access to any information.

These technological instruments were pointed out as facilitating, practical and innovative mechanisms, whose access to the Internet has the possibility of clarifying doubts, verifying information on the worldwide network (www), as well as using mobile applications help in these activities. The use rate of smartphones is much higher due to the numerous functionalities that they gather into a single device.

With the advent of the Internet, it was possible to develop e-commerce, which today is very strong all over the world in addition to the banking/financial system, making it possible to carry out any activity through clicks, quickly, with low cost and barely any physical movement.

When asked about the management of the company's website, all interviewees informed that it is a very important platform to present to the market/tourists complete information about the service and location, aside from being a way of transmitting security, as it will be available for network access. But according to the interviewees, many did not consider the importance of adapting the website to mobile access such as smartphones, and 59 people, equivalent to 73%, said they do not have a website adapted for mobile viewing. The remaining 27% present this concern because they know of the advancement of technology through mobile equipment, in addition to making their site fully adapted so that the people accessing it have an easy way to make a purchase, send questions or share/divulge information with other people through social networks.

Even knowing the importance of mobile technologies in today's world, where people are increasingly researching and using their mobile to search information anytime, anywhere, companies do not make their product or service available through mobile devices. And in order for one's business to have higher visibility, as well as the promotion and commercialization of one's activity, this action should be included in the management of the company, making it possible to reach the target audience even faster.
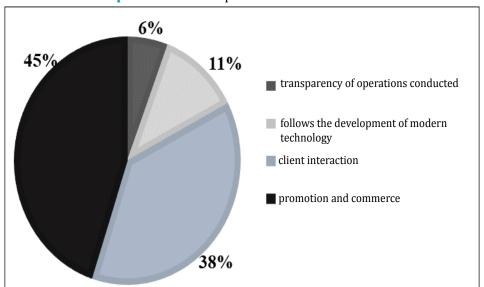
Today, the potential customer is fully focused on the use of mobile technology. Thus, whenever the user uses their smartphone or tablet to search for a specific tourism destination or specific equipment—such as hotel, inn, restaurant or park—to know more information and is not able to view it properly due to problems in the website, the user will likely give up. In this way, the destination may lose its demand, since the tourist offer companies do not have the concern to follow the evolution and modernization of technology in order to reach customers in all manners, including mobile devices.

Mobile technology has provided advances in various fields of economics, politics, culture, environment, leisure, business and commerce in general, with the possibility of inserting them into social communication networks such as Facebook, Twitter, Instagram and LinkedIn, tools who are present in the daily lives of the personal and professional lives of billions of people in the world.

Regarding social networks (Facebook and Instagram), 85% of respondents have one or two ways to maintain a relationship with their client, and 15%, equivalent to 12 respondents, reported not having any social networks, as they are still micro-entrepreneurs (MEI) with a reduced amount of labor to administer these tools, but stated that their management goal is to implement them in the near future. This minimum amount is aware of the importance of social networks in the development and maintenance of their business, since they are tools that

can provide statistical data essential to the planning and execution of strategies of reaching the client.

As a consequence of the previous answer, another question pertained to the motivation of having the company in social networks. For the 69 respondents who have social networks (Facebook, Instagram), 45% reported having done so because of the promotion and commercialization of the product or service offered, as advertisement is easy and the costs are low, that is, social networks are sales and marketing strategy tools. While 38% stated that the main reason is the interaction with the customer, the possibility of the client/tourist following all the updates of the company, including real time Instagram *stories*, carrying out promotional campaigns, raffles to win more customers (followers) and the dissemination of important information that can be visualized by the cellphone (Graph 1).

Graph 1 – Reason for presence in social networks
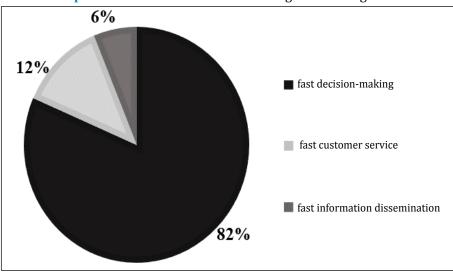

Source – Prepared by the authors

The remaining reasons are explained in Graph 1. A small part reported that, in order not to stay out of the innovative world of social networks, they have a team to feed the profile with information about the company, however without much interaction with its client, in order to share knowledge about the activities that the organization performs.

One of the answers (6% of interviewees) describes the profile of public managers using social networks well, being motivated to show the actions they develop for the citizen. As social networks have many users, public management, in order to be closer to their voters, join them and seek to intensify its use to also collect feedback of their actions from their citizens, as well as suggestions to continue improving society.

With the advancement and strengthening of social networks as a tool for communication, information, sale and interaction with society and/or client, municipal and state public managers use them to disseminate the results of investments in basic infrastructure and tourism, basic and environmental sanitation, maintenance of the public good, inaugurations, among other actions

that favor the public administration and benefit its citizens in an open and transparent way with the use of technology for such purposes.

The last question in the questionnaire was essential to answer the objective of this study, since 82% reported that the new mobile technologies are relevant tools that facilitate and accelerate decision-making and action strategies to reach the tourist and solve day-to-day personal and business needs (Graph 2).

Graph 2 – Influence of mobile technologies in management

Source – Prepared by the authors

The other influence is fast customer service, a response given mainly by travel agencies, with 12%, justified by the fact that the customer, when sending an email or a message through social network, wants the response to be as soon as possible. In order not to lose the customer, having this mobile technology facility is an opportunity to increase productivity and loyalty, improving the management of the company.

According to Graph 2, a lower figure of 6%, equivalent to five companies, responded that they use new mobile technologies due to the speed of information dissemination, especially when considering the internet factor that influences and assists as fast as possible in the internal and external activities of the company.

FINAL REMARKS

The intervention of mobile technologies in the use-case perspective of public managers and tourist service providers provides modifications in way activity management is conducted, influencing, as intermediary and relevant tools, in the decision making, in the fast and agile service to the clients, in the speed of information dissemination in real time, and action strategies regarding the use of social networks to reach the tourist.

The results of this study are recommended to be presented to the other components of the tourism *trade*, as well as to interviewees themselves so that they can perceive and use the level of influence that mobile technologies exert in the successful management of activities in the company and of tourism

development, giving more visibility to products and services that are not yet offered to reach the client/tourist, "tuned" with new reference standards on the advanced use of mobile technologies.

The relationship between technology and governance must be practiced, becoming a reality and enabling a more efficient, effective, cooperative and competitive management of companies through the valorization and active participation of all affected professionals involved in tourism development.

The results obtained in this field research by means of representative sampling allow to conclude that there is influence of technology—mobile technologies—in the activity management of tourism services providers in Aracaju. Likewise, the overall result of the forms shows how technology, especially mobile, is embedded in the activities of tourism service providers, as well as in the municipal management of Aracaju and in the state management of Sergipe.

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Leylane Meneses Martins: Definition of the research question and objectives; development of the theoretical proposition; bibliographic review and theoretical framework; choice of methodological procedures, data collection; writing of the manuscript; adequacy of the manuscript to RTA standards.

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