

# [Current and potential future use of is and icts tourism essay](https://assignbuster.com/current-and-potential-future-use-of-is-and-icts-tourism-essay/)

The advent of information technology has brought a drastic change in the structural composition of the tourism industry. Information is the life-blood of this industry and technology has become essential for it to operate resourcefully and efficiently. The focus of this report is to analyze the use and implications of information systems (IS) and Information communication technology (ICT) in the tourism industry of United Kingdom (UK) and to outline the opportunities and challenges faced by tourism sector in this context. The main objective of this essay is to describe how ICT is being used for conducting businesses, to assess the impact of this development for firms and for the industry as a whole. It looks at the size and the structural components of UK tourism industry. The current and potential future use of ICT/IS in UK¿½s tourism industry are also overviewed . Moreover the ICT tools and applications that have transformed this industry are identified and discussed in detail.

1. Introduction

The revolution in information technology (IT) and the emergence of new Information Communications Technologies (ICTs) have left a marked impact on every aspect of human life especially social and economical. ICTs have played a major role in the economic productivity of businesses and have become a part of every business strategy. As tourism industry is the key to the economic sector, thereby ICTs and tourism are directly linked. Tourism is one of the world¿½s largest industries, adding up to 10. 6 % of the global GDP, contributing to 8. 3 % of the total world employment (World Travel and Tourism Council, 2006). It is among the first sectors which embraced the persistent evolution in field of Information and communication technology (Garzotto, 2004).

Defining the tourist industry is difficult. It is not an industry that is grouped into a single heading within the Standard Industrial Classification (SIC). The defining feature of tourism is not the product, but the purchaser, the ¿½tourist¿½. Most definitions concentrate on the services that a number of different industries, such as the travel industry; hotels and catering; retailing and entertainment provide to tourists. The internationally agreed definition of tourism says that:

¿½[T]ourism comprises the activities of persons travelling to and staying places outside their usual environment for not more than one consecutive year for leisure, business and other purposes¿½ (Eurostat, 1998)

According to the NACE classifications of business activities (2005), tourism consists of a number of different sub-sectors, e. g. the accommodation sector, gastronomy, the transport sector, travel agencies and tour operators as well as recreational, cultural and sporting activities. (E-business watch, 2005) Since the tourism industry is a vast sector and can be define in following sub-sectors i. e. tour operators, travel agents, accommodation providers, Airlines and airports, Regulatory bodies, Public sector organisations and QUANGOs; So this report focus on the sub-sector of tourism industry that is ¿½Travel Agencies¿½. According to John Beech and Simon Chadwick (2005) Travel Agencies are define as the business that is established to sell travel products and Travel agent refers as the retailer of travel and related products or a sales person employed to sell travel products (Beech and Chadwick, 2005)

The purpose of this report introduces the proposed study aimed at analyzing the implementation of information and communication technologies and the use of Information System (IS) in UK¿½s tourism industries especially travel agencies in order to describe and critically investigate the current and potential future of the industry. This paper also aims to show how technological innovations and information systems can be beneficial for the tourism industry¿½s subsector travel agencies. The report commences with the strategic frameworks which provides an overview of the industry analysis and context for the study. Section 2 provide the detailed and logical analysis of the travel agencies in which different models and framework are use to explain it, whilst, Section 3 focuses on the description and critical analysis of the current use of IS and ICTs within the tourism industry¿½s subsector. Section 4 provide the description and evaluation of the potential future use of IS and ICTs within the industry sector considerations as well as the challenges and limitations forecast in the potential future of the UK¿½s travel agencies. The report concludes with Section 4.

2. Industry Analysis

This section presents the framework or models that can be used to aid with an industrial analysis of tourism industry of UK. For reasons of method and scope this report focused on travel agencies or travel retail industry. Travel agencies plays vital role in tourism industry. They act as the communication link between the suppliers and the clients. They work on a behalf of the tour operators providing travel services such as airline tickets, hotel rooms and train tickets. With the evolution of the World Wide Web, every type of business has gained some presence on the internet; as a result most of the travel agencies of UK have gained presence on the internet. The Internet is having a profound effect on the internal and external operating procedures within the travel industry (Cheng & Piccoli, 2002). Some of the famous web travel agencies working in UK are travel zoo, hostel bookers, London Duck Tours, Lastminute. com, Thomas Cook, Jim Thompsons, Regent Street and many more.

There are many frameworks or models that can be used to aid with an industrial analysis . These models are general and frequently used by many organizations and governing bodies today for the purpose of the in-depth industrial analysis and its impact on the industry.

2. 1 SWOT Analysis

A SWOT analysis is strategically model which follows from finding a form between external environment and internal capabilities.

Strength:

Travel agencies are the communication bridge between tour operator and customers and due to evolution of IS and ICT, the communication gab is getting lesser. Travel agencies just provide services and do not buy products from the supplier. Hence there are no stocks and no economical threats. The internet is constantly growing and throwing up new challenges to the industry which in turn help travel agencies to add to their marketing approach in the best possible ways. Travel agents work to make sure that the most demanding product is available in the right place and at the right time. (Cooper, 2005)

Weakness:

The consumer can now compare prices and book online travel tickets and make reservation for hotels and car rentals. Collins, Buhalis and Peters (2003) state that the overall percentage of hotel rooms booked online grows tremendously each year and will keep on increasing; due to which travel agencies are keep on losing their market and clients.

Opportunities:

Development of new technologies along with Internet and e-commerce has given birth to e-tourism (Lashley, 2005). Where e-tourism has great benefits for the consumers and the travel agencies as well, travel agencies get various opportunities regarding marketing and increasing their client network from local area to global.

Threats:

Travel agencies are the major alternative to the internet sales, when it comes to travel packages. Lashley and Rowson (2005) suggest that recent IT developments, offer new opportunities for tour operators with the rise of e-tourism. This is a great threat to travel agencies.

2. 2 Pest analysis

PEST analysis is a technique for identifying the political, economic, social and technological factors in the general environment most relevant to an organisation (Boddy, 2002).

Political and legal:

Though the internet appears to be an autonomous and independent working body to many, it still has to obey the regulations and limitations laid by the UK government on various matters of concern especially regarding the security. IS and ICTs applications has great benefits for the consumers and the travel agencies as well, various matters regarding copy rights, the comfort level of the user, standardizing the information; the booking procedure etc needs to be handled tactfully. Sometimes travel agencies in UK are unaware of the possible legal risk which might be involved in violating the anti thrust laws enforced by the UK government. In order to avoid such risks the travel agencies need to be properly educated in order to develop a better understanding of these problems. To help with this there are currently five tourists¿½ boards working in UK: the British Tourist Authority, the English Tourism Council, the tourist boards for Scotland and Wales and Northern Ireland (Bardgett, 2000).

Economic:

The economic crisis has never been a potential threat to the internet as such. However the UK travel agencies have to face the consequences to a greater degree from UK economical recession. Consumers cut-down on online bookings and hotel sales during the days of recession in UK. As tourism contributes to a great extent to the GDP of UK (Bardgett, 2000), the recession and inflation affects the travel agencies badly . This in turn makes the Travel organizations to lose their cost advantage.

SOCIAL:

The time when the consumer had little information about the possible tourist destinations does not exist anymore. The internet has made it all easier. The users now come up with plenty of information about the location they plan to visit without the help from any travel agencies. This affects the tourism industry socially and culturally. Some essential measures should be taken for interaction of different social groups with each other.

Technological:

The revolution in IT and the emergence of information communication technologies brought significant structural changes in the UK travel agencies. GDSs serve more than 50, 000 travel agents world-wide (Collins, Buhalis and Peters, 2003). Development of geographical information system (GIS) and computer reservation system (CRS) are important tools that helped in modifying the tourism industry.

3. Current Use of Information Systems

In this section a critical analysis of the ways that information systems (IS) and information and communications technologies (ICTs) are currently used within the industry. Information and communication technologies have totally transformed the way information was conveyed in the past. Traditionally the consumer had to walk to the local street travel agencies, search for possible destinations in the brochure, look for economy holiday packages, arrange meetings with the tour operators, and seldom end up getting frustrated. With the access to the internet, consumers can now get any type of information online. They can read reviews on different destinations, and go for online booking by visiting online travel agents of their choice. Travel services can therefore be provided to the consumers in a flexible way. As the ¿½new economy¿½ was created through the use of Digital Technologies, Internet and ICTs any company who operates within it will use the technological assets to their advantage to promote and deliver their products and services to the consumers within the market (Combe, 2006). The travel agencies have proved to be particularly adaptive in embracing the changes in the IT industry, so it has gained a large share on the online e-commerce market since it is largely consumer oriented. Werthner & Klein (1999) suggest

¿½Tourism is a hybrid industry since even though it is dominated by the provision of information; essentially it is about a physical product. This requires the ¿½seamless¿½ integration of information and physical service, with flexible configurations of the physical and the informational parts.¿½

The Travel agencies of UK readily adapted to the changes brought by the ongoing development in the field of ICT and IS. The involvement of ICT in this industry is not new and dates back to mid 1960¿½s. ¿½ICT tools have facilitated business transaction in the industry by networking with trading partners, distribution of product services and providing information to consumers across the globe¿½ (Shanker, 2008)

3. 1 The use of Decision Support Systems

A decision support system (DSS) can be defined according to Oz (2006) as,

¿½A computer based information system designed to help managers select one of the many alternatives solutions to a problem.¿½

An example of an important DSS application of information systems in the travel and tourism industry is the Geographical Information System (GIS). GIS integrates hardware, software, and data for capturing, managing, analyzing, and displaying all forms of geographically referenced information. GIS has provided efficient solutions to the problems of the tourists and travel agencies in reference to geographical positions of objects and surroundings.

ICTs have now developed various applications in sustainable tourism development. Dr Andrew Frew (2009) proposed that using the applications of ICT¿½s, Sustainable Tourism Development (STD) can play an important role in destination management. STD is an integrated approach and involves stakeholders for long term viability and quality of social, economical and environmental resources (Frew and Ali, 2009) . STD has much to do with decision making (DSS). If the destination manager has sound methods of monitoring and analyzing environmental data, the routes tourists¿½ uses, the frequency of use and timings and how tourists account for time, space and place, they can better support planning to ensure tourism is more sustainable for destinations (Gretzel & Law, 2010).

3. 2 Collaboration through Knowledge in online banking Sharing

Combe (2006, p. 74) states that,

¿½Collaboration between organizations is the key feature of the modern business environment¿½.

The collaboration platforms are specifically created to pass information from one organization to another whether for example customer information. Electronic distribution channels have gained significant impotence after the revolution in IT industry. ¿½ICTs transformed distribution to an electronic marketplace, where access to information and ubiquity is achieved, while interactivity between principals and consumers is empowered¿½ (Buhalis, 1998). Some of the important ICT tools and applications help in collaboration of the tourism industry Used in UK are: Destination Management System (DRS), Global Positioning system (GPS), Tourism Information System (TIS), Information management of weather and intelligent transport system (IST). Other collaboration applications are following.

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3. 3 The applications currently used within the Travel agencies industry

Shanker. D (2008) suggests the three important innovations that redesigned the organizational structure of the travel agencies are

1-Development of the Computer Reservation System (CRS)

2-Development of Global Distribution System (GDS) and last but not least

3-The Internet

3. 3. 1 Computer Reservation Systems (CRSs)

As the entire travel industry¿½s structure had been reorganized by the revolution in ICT, the airline industry did well to cope with the situation. The term CRS is denotes ¿½electronic airline reservation system, used for managing flight and seat inventories for sales and operation purposes¿½. Hence the CRS were virtually necessary to the airlines and travel agencies as it helped the revenue streams to be maximized. The technology uses the computers in a different and unique way. The host computer has a massive database attached to it which basically works as a CRS. The travel agents are connected to this host computer. The mainframe host polls each travel agent terminal every second or so, to see if it has any messages to send (Inkpen, 1998). In this way the hotels and other rental services get in a direct connection to the travel agent. CRSs often charge competitive commission rates in comparison with other distribution options, whilst enabling flexible pricing and capacity alterations in order to adjust supply to demand fluctuations (Buhalis, 1998). CRS have contributed both strategic management of the industry and one of the great example for collaboration and DSS tools.

Figure 1 Source: Werthner and Klein (1999), GDS: Global distribution system, CRS: Central reservation system, DMC: Destination Management Company, DMO: Destination Marketing Organization

Figure2, Source: Werthner and Klein (1999), GDS: Global distribution system, CRS: Central reservation system, DMC: Destination Management Company, DMO: Destination Marketing Organization

3. 3. 2 Global Distribution Systems (GDSs)

Global distribution system acts as a directory which contains information about number of travel agents and hotels so the travel agents can meet consumers on global basis. GDSs serve more than 50, 000 travel agents world-wide (Collins, Buhalis and Peters, 2003). CRS were introduced into the airline industry in mid 1980¿½s and soon emerged into global distribution system (GDS) by expanding their geographical coverage and by increasing their interactivity with the airline systems and other tourism services including hotels, car rentals, ferry ticketing, entertainment and other provision (Buhalis, 1998). GDS usually provide travel agents with multiple CRS. Amadeus and Galileo are important examples in regard to UK travel agencies. Ioana Cristiana (2009) puts it as ¿½the travel organizations use travel service distribution companies who operate Global Distribution Systems (GDS), such as Sabre Holdings, Amadeus, Galileo and Worldspan, to provide up to the minute, detailed information on tens of thousands of flight, hotel and car rental vacancies¿½. These ¿½world leading¿½ GDSs are switches or simply computers that are connected on the one side to many different supplier systems and on the other side to many end users. The end users of switch comprise travel agents with a single reservation system to support the sales of airline seats and related travel products such as hotel and car hire, via a single computer terminal, usually a Personal Computer (Buhalis, 1998). GDS have a strong market share and they have become a business in their own ways . GDS have now taken the place of CRS and therefore one of the most important DSS and collaboration ICT tools used by the travel and tourism industry today.

3. 3. 3 Use of Internet by the travel agencies

Most of the travel agencies have gained some presence on the internet. Where is of great benefit to the consumer, it has helped the travel agencies to improve their market value. However booking from these online travel agencies is sometimes complex to understand. The travel agents today make use of packaging tools. These travel agents have links with sites that sell hotels online. Expeidia. co. uk is the most well-known example of travel agency operating online in UK. Cristiana also suggests that the rapid growth in this industry has provided an opportunity for non-tourism organizations such as Microsoft to enter the tourism market, and in doing so, to create competition for traditional high street travel agents.

4. Potential Future Use of Information Systems

¿½A fundamental rule in technology says that whatever can be done will be done¿½

(Grove, 2001)

This section is to discuss the potential future use of IS and ICT for travel agencies. Since internet services are so popular and easily accessible. This section is to discuss what the future is for travel agencies in today¿½s world, when internet services are so popular and easily accessible.

As discuss by Shanker, D (2008) ¿½Wireless¿½ is one of the next major technologies for travel industry, its application will enhancing in future. As mobiles are keep decreasing in size, weight and price on the other hand keep on increasing in power, storage, connectivity, position and capabilities therefore the mobile services will be an important channel of information and tourism services distribution for both providers and consumers in future. Electronic personal guide will be in common practice. Moreover Short Message Services (SMS), Wireless Application Protocol (WAP) standard for accessing the Internet with wireless devices like mobile phones will be improved. GNSS (Global Navigation Satellite System), for the position and GPRS (General Packet Radio Services) help in handling better quantities of data than the GSM network will be practical in tourism industry. W-LAN (Wireless Local Area Networks) and Blue tooth, which gives wireless communication at small distance, can also be practical for travel agencies.

Usability is extremely significant feature in future for the ICT integration in travel industry. Shanker, D (2008) defines usability as ¿½the measure to the quality of a user¿½s experience while using the ICT tools¿½. It could be an outcome of an IS, a software application, website, cellular technology or other information technology. It is vital for all the technology and application compatible with each other with respect to user interface, band width and location.

All applications, technology and services should be user friendly which can handle by the experts or the new beginners efficiently. Customer relations management (CRM) technologies can be enhanced by different travel agencies strategies which maintain the previous customer¿½s attention as well as drawing fresh potential customers. Thre should be new technologies for setting up the expedition which helps in booking of all trips, also help in staying different places or just local tours. In other words it should facilitate from the starting to the finish of the trip.

Pre trip session, during trip session and post trip sessions should be properly laid out and implemented. Such activities can be better streamlined if the reservations facility can be outsourced as much as possible. Arrangement should be made for ¿½Live Chat¿½ so that all queries of the customer are answered at any time. Reviews by the customer, feed backs and surveys should be in progress to know the gaps if any. SMS can also be used for logistic updates (Shanker, 2008).

5. Conclusion

Tourism is today world¿½s largest growing industry generating of employment, GDP and investment opportunities. It is particularly beneficial for the economic growth of the developing countries. The contribution of travel organizations towards social and economical development is immense. The tools of ICT have redesigned the structure of the traditional travel industry. In this report the prominent changes that IT has brought in the travel agencies are overviewed. The applications of ICT tools that have played an important in the development of tourism industry are also discussed. It is also noted that due certain attributes of travel industry, the use of ICT tools and applications is more pronounced in this industry. The essay has particularly stressed on the current and future use of the tools of ICT/IS in the travel industry of UK and has aimed to develop a better understand of the applications of these tools.