RESEARCH FOR TRAN COMMITTEE - THE DIGITISATION OF TOURISM ENTERPRISES

IN-DEPTH ANALYSIS
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Abstract

This analysis synthesizes the effects of information technology developments on tourism SMEs in the European Union. The effects were found to be profoundly disruptive to traditional business models of tourism information and distribution. Policy developments supporting research, education and facilitating change in tourism SMEs are called for.
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\(^1\) The Vancouver Style of referencing has been used in this study/note. A number has been assigned to each source used. Full details are listed in numerical order in the references section at the end of the document.
LIST OF ABBREVIATIONS

**DMO**  Destination Marketing or Management Organization

**eWOM**  Electronic Word of Mouth

**GPS**  Global Positioning System

**ICT**  Information and Communication Technology

**LBS**  Location Based Services

**OTA**  Online Travel Agent

**SEO**  Search Engine Optimisation

**SME**  Small and/or Medium Enterprise

**UGC**  User Generated Content
EXECUTIVE SUMMARY

Background

Tourism is an important global economic force driven by customers’ information search and decision-making processes, which increasingly take place online. Numerous technological platforms have reshaped the landscape and distribution of tourism information for small and medium sized enterprises (SMEs) in Europe.

Aim

The objective of the analysis is to support the Parliamentary debate on the promotion of the digital innovation and its development in micro-enterprises and SMEs.

Findings

The tourism industry as a whole is undergoing a dramatic change in which technology empowers consumers to perform functions previously fulfilled by intermediaries. Customers participate in the co-creation of their information, booking, and experience processes through new information streams, social media, user-generated content and location-based services. Trends in tourism production are also visible, including data analytics, increasing collaboration between tourism sub-sectors and shifts in booking time, space and price facilitated by technology. In this environment, there is rapid consolidation as innovation cycles shorten dramatically. A few large companies such as the Priceline group, Expedia, and Google2 grow increasingly dominant. These changes pose existential risks to tourism SMEs using traditional business models, but create opportunities for new ones; especially those focused on technical solutions, data analytics or highly personalized customer experiences. Success stories show an intersection between technical innovation, sensitivity to customer behaviour and creativity.

Recommendations

Key recommendations for EU policy include encouraging research, education and cooperation. Ultimately, the most effective policies will bridge the gap between traditional tourism business models and technological innovators.

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2 One of the main threads of digitisation of tourism is that ICT based companies more and more provide (for free) functions that originally were offered by online travel agencies. This may seriously hamper the development of the contemporary tourism sector.
1. INTRODUCTION

KEY FINDINGS

- The tourism industry as a whole is undergoing a dramatic change in which technology empowers consumers to perform functions previously fulfilled by intermediaries.
- These changes pose existential risks to tourism SMEs using traditional business models, but create opportunities for new ones; especially those focused on technical solutions, data analytics or highly personalized customer experiences.

1.1. Tourism is an information-intensive sector

Travel and holidays are one of the most expensive items purchased regularly by households around the world and represent a significant proportion of annual household budgets. Decision formation in tourism is associated with an extensive, dynamic information search. Not only do customers gather information to make choices, but also to confirm and compare choices they have already made (1). The processes increasingly take place online (2).

In general tourism is taken to refer to a ‘bundle’ of services related to travel, accommodation, etc. away from home. Although these are often purchased as a ‘package’ they are rarely provided by a single organisation, more often they are a number of individual products or services, predominantly provided by local SMEs, linked together to form a single experience (3).

Tourism is an information-intensive sector, because tourists need not only to be provided with information about different services, attractions, routes and tourist guides in general, but also with updates and news. The relationship between ICT and tourism has been very close, because of the prevalence of information in tourism sector (4). Since the introduction of computer reservation systems in the early 1960s, ICT has become a fundamental part of the travel industry and now, with the prevalence of Internet-enabled devises, it forms a significant part of tourists’ decision process (5).

As a consequence of new technology, more experienced consumers, global economic restructuring and environmental limits to growth, the tourism industry is changing dramatically. On the basis of the value chain, it is clear that distribution and information lie at the heart of the industry’s wealth-creating process (6). Tourism experiences are complex products, which encourages consumers to keep risks to a minimum. Thus, tourism customers express a profound need for precise, personalised, social information on the components of experiences they consider purchasing. SMEs that deliver these components, such as transport, accommodation, guided tours, museums, restaurants and intermediaries are therefore more linked to their customers’ information needs than ever before. With over 99% of European tourism businesses having fewer than 250 employees and 94% fewer than 10, the sector is dominated by SMEs. However, because of the limited specialisation within these businesses, many do not have the knowledge required to capture the full benefits of the growth in this market. Therefore the ability of these businesses to cope with and benefit from ever-increasing advances in technology is an important issue for the future of the industry in Europe (7).
1.2. **Aim and objectives**

The objective of this briefing note is to support the Parliamentary debate on the promotion of digital innovation and its development in micro-enterprises and SMEs within the European tourism sector.

This report provides:

1. a description of the impact and extension of digital changes affecting the activity of tourism SMEs in the European Union;
2. an overview of the key influencing factors and digital trends within the landscape of tourism SMEs, with particular regard to possible differences among Member States, regions and sectors;
3. an outline of the most successful ICT and tourism service practices. In particular, the note assesses the penetration of ICT technologies in tourism on different levels: firstly, the service mediation level, i.e. information searches, secondly, digitisation of local service delivery, thirdly, digitisation of other para-services, such as security or health care. Finally, ICTs involve financial aspects, and raises questions, of personal data protection and personal security.

The current in-depth analysis focuses on ICT practices in travel mediation, destination management and accommodation and how tourism SMEs in the EU may respond to these developments.
2. KEY INFLUENCING FACTORS AND DIGITAL TRENDS

**KEY FINDINGS**

- The most substantial digital trend in tourism is the power of consumers to shape their own experiences.
- Tourists participate in the co-creation of their information, booking and experience through new information streams, social media, user-generated content and location-based services.
- Trends in tourism production are also visible, including data analytics, increasing collaboration between tourism sub-sectors and shifts in booking time, space and price facilitated by technology.

This chapter describes the findings regarding the first and second aims of the analysis as outlined in section 1.2: A synthetic description of the impact and the extent of the digital changes affecting the activity of tourism SMEs in the EU and an overview of the key influencing factors and digital trends within the landscape of the SMEs, with particular regard to possible differences between Member States/ regions/ sectors in the EU tourism.

Two main forces in ICT are changing the tourism sector: the increasing participation of consumers in searching, purchasing, evaluating and communicating about the components of their tourism experiences and changes in the production of these components (8). The dramatic changes in access to information and products have enabled more engaged, dynamic behaviour by tourism consumers. Technology has also enabled development of new product concepts and blends, sold through new channels and over new time spans.

### 2.1. Increasing participation of consumers

From information search, to destination/product consumption and post-experience engagement, ICTs have become one of the most important routes for tourist information, because connective technologies have made information accessible, affordable and social (9, 10). In addition to allowing tourists to book travel, accommodation, etcetera, quickly and at a time convenient to them, it gives easy access to up-to-date information on potential destinations at little cost (9). Data from the European Travel Monitor reveal that in 2009, 60% of Europeans either booked directly through the Internet (48%) or used it to check out the alternatives (12%) (11); by 2013 direct booking on the Internet had reached 70%, although it may now be reaching saturation point (12).

Today’s travel consumers are increasingly looking for products and experiences that connect with their values and are consistent with their own lifestyles. They want to create their own identity and they do so by means of self-expression, unique experiences and authenticity. These experiences may even inspire a permanent change in their lives. Consumer involvement is essential in order to really connect with purchasers. The consumer is looking for value and meaning and wants to be involved in the creation of value and meaning (13). Connective ICTs play a crucial role in connecting consumers to the fine-grained, personalised and social information they need to purchase individually meaningful experiences, which is compelling travel and tourism providers to place greater emphasis on consumer experience and how this is shared (14). In fact consumers have more power over value creation than previously. The involvement of consumers with the world, their social network and organisations is intensified by the growth of (especially mobile) internet-based applications. The present-day European consumer is part of online networks and has access to almost infinite sources of information on which to base her or
his decisions. However, the Internet has become more than a source of information; users can now interact with each other sharing information and experiences, often in real time and at a more personal level (15).

Smartphones and other Internet-enabled devices have accelerated these developments. A fifth of UK tourists booked their most recent overseas holiday on one of these devices, with a 30% increase in the use of Internet-enabled devices between 2012 and 2013, whilst at the same time the number of those accessing the Internet using a conventional desk-top PC declined slightly. A significant proportion of the growth has come through the use of dedicated apps which increased by 40%, compared to an increase of 26% through mobile browsers (16).

2.1.1. Social media

Next to commercial websites containing travel information, social media have become very important tools in tourist decision-making processes (10, 17, 18, 19, 20). Social media are generally defined widely to include blogs, chat rooms, discussion boards, e-mail, forums, ‘moblogs’ (where content is generated through mobile devices), service ratings websites and social networks (19). The latter have driven the increasingly social, personalised nature of Internet use, sometimes referred to as ‘Web 2.0’.

Individuals make use of social network sites such as Facebook, Twitter, Pinterest, Instagram and YouTube to search for travel information as well as to share their own experiences with other users. Hence, these kinds of social media services enable consumers to assist each other in travel information gathering and decision-making by making personal information and experiences available (18). With social media, interactive communication and user engagement are easier than with traditional media (20). SMEs’ involvement in social media is very important to develop loyalty, generate relevant content and increase awareness and, because the contents come from participants own social contacts, they are trusted more than normal advertising, both in terms of brand perception (5) and product quality (11).

Social media are also a tool to reach a global audience with limited resources and, therefore they should be an integral part of marketing (19, 21). Some firms, such as Hotelied, even deliberately purchase a form of advertising through social media by offering customers with large social networks discounts in exchange for testimonials. One can imagine the short-lived nature of this strategy as social media postings are not necessarily completely factual and in reality it would be difficult to ensure that all the postings generated from this would be positive. The discount system is also open to abuse as it is relatively simple and cheap to purchase followers, so the real size of base may be exaggerated (22).

Online communities, including topic-specific travel communities, are also growing quickly. Stories posted to travel blogs are sources of inspiration for readers who identify with authors’ online personalities. Travel communities with inspiring tips and advice for travellers offer their customers an information marketplace to decide and plan travel and activities. They can build their travel packages themselves and function as their own travel agent (8). Thus, the technology has essentially facilitated an existing trend toward personalisation, customisation and co-creation. Tourists have long been motivated to pursue unique experiences and authenticity (13), but the proliferation of official and unofficial travel-themed information on social media makes that pursuit easier and more dynamic than ever.
The challenge for marketers is to manage and direct public opinion by using social media in deliberate, striking, pro-active and emotionally intelligent ways. If a person, especially an opinion leader, uploads reports of a negative travel experience to social media or comments on a microblog, it can quickly damage the good reputation of a company or destination (23).

2.1.2. User-generated content

The desire for unique, authentic experiences has coincided with the opportunity to share these experiences with others. As a result there has been an explosion in the use of social media sites to display information, photos and videos. These experiences reflect and strengthen people’s identities (13).

Shared information, photos, and videos are known as user generated content (UGC) (10, 18). UGC refers to the information that is digitalised, uploaded by the users and made available through the Internet, often over social media or review websites/apps (24). In marketing terms, UGC is also called electronic word-of-mouth (eWOM). In the past, WOM tended to remain contained within an individual’s (offline) social network, but current developments in ICT makes it possible for consumers to expand the size of their social networks and make social communications more public than before (25). A study in 2007 supported by the review site TripAdvisor clearly shows the influence of UGC (26), especially reviews in the decision making process of tourists (27).

There is a strong perception that consumers trust reviews or eWOM more than commercial advertising (28). However, there is sometimes concern over the credibility of the source of the review as online reviews are passed on by total strangers or, in some cases, paid affiliates. Even with honest, voluntary reviewers, the subjectivity of reviews raises issues; is a positive or negative experience being blown out of proportion? The travel experience of the reviewer also plays a role (28). People who have experience of all-inclusive resorts, for example, will have higher standards and will be more readily disappointed than those who go for the first time. Individual companies have an interest in stimulating positive reviews and preventing negative evaluations; there have been reports of hoteliers who pay guests for positive reviews. ‘Foul play’ cannot be ruled out either, as fictitious or fraudulent negative reviews can be posted to show a competitor in a bad light. Another study found that UGC are not necessarily considered to be the most trustworthy or useful source of travel information (27). In some cases information on public tourism and airline websites is considered the most reliable when planning a trip.

User-generated content (UGC) from reviews is increasingly intertwined with travel marketing strategy. Given the finding that UGC photos at a destination prompt a stronger emotional response than stock photos (29), destination managers as well as tour operating SMEs are harnessing photos and movies shared by customers as uniquely powerful testimonials to the experiences they sell.

UGC is an important information source for consumers. Good comments and reviews can boost product and service sales and marketers can use social media to improve search engine results (10, 30). Not only reviews, but UGC more generally, is one of the action points for e-marketing and destination brands (31). Like any media, as UGC matures questions about reliability and spontaneity of marketing messages arise. Some authors have recommended the development of an integrated ‘e-strategy’ to situate UGC in marketing strategies (27).
2.1.3. Mobile and location-based services

Global Positioning System (GPS) satellite receiver hardware in mobile phones and tablets has made it possible to integrate customers’ locations into their social and commercial interactions in a constantly connected lifestyle (31). Customers may receive advertising, search results and directions from various mobile apps based on their location. These location-based services (LBS) have become more and more important, expanding in number and variety. Both the use of the Internet, especially with the use of mobile phones, and the consequent use of LBS are growing (4).

Location-based services (LBS) are useful to enhance all tourism services, particularly in promoting and suggesting local services during a visit, for example, it would enable tour companies to remain in contact with tourists whilst at the destination (4). In tourism destinations, adaptation to the growth in location-based services is two-fold; on the one hand, information has to be adapted to the demand side (tourist’s expectations) and on the other, the possibility to present offers to customers based on location creates new marketing and co-branding opportunities for destination marketing organisations. The use of LBS might help to reduce costs; by tailoring marketing based on location and previously held customer profiles greater impact might be achieved compared to traditional blanket approaches (4). It is especially crucial for destination marketing organisations to take up the challenge of LBS, if information is allowed to become out-of-date, for example, the image of the destination may be damaged. It is important for Destination Management Organisations (DMO) to take the lead in developing LBS within their location as it offers the opportunity to provide highly personalised communication paths to their visitors (4).

2.2. Changes in production processes

The main impact on tourism SMEs of developments in ICT has been empowerment of consumers. Nevertheless, ICT has also enabled tourism businesses to produce tourism experiences in new ways. A number of potential improvements in the production processes have occurred as a result of ICT:

- “The ability to offer integrated services, a process in which enterprises, using ICT, create and produce a range of services that come from different industries but between which there is some interdependence, and that the consumer (tourist) simultaneously demand;

- The ability of ICT to reduce costs, facilitating price transparency and altering the barriers to entry;

- The ability of ICT to improve the quality of service and contributing to increasing customer satisfaction;

- Also, the flexibility in the effective supply of the products, i.e. the ability of the bidder to suit different market conditions in time and space” (8).

Even these opportunities relate to the power of the consumer. The tourism industry is changing from a service industry to a knowledge industry based on an increasing proportion of travel planning and execution that customers undertake themselves. Expectations are now such that they should be able to travel within a few days of booking (32) and potentially within hours. This immediacy has resulted in mobile sales of travel being powered by impulse (16). The value propositions of new entrants such as TravelBird (see 3.3.2) are to facilitate and personalise this process, while traditional tour operators increasingly see their product-based business model under pressure. Under the emerging business models of facilitation and personalisation, it is important to collect consumer data,
organise and analyse it to detect patterns that are useful for the business and for future decisions.

2.2.1. Data analytics

The most profitable businesses in the ICT sector, such as Apple and Google, are premised on tracking individualised consumer demands and expectations to meet them in real time. This opportunity also exists for tourism SMEs if they are able to collect relevant data and translate this into tourism information and products that fit their markets’ latent needs. The growth in this data has been exponential, it is estimated that 90% of it was created within the last 2 years (44). Collection of such data increasingly only occurs with implicit consent from consumers, who, in exchange for a higher quality and more personalised experience, provide increasing amounts of personal data (9). Companies that are able to make this exchange based on computing and analytical power stand to profit. They use techniques such as data mining and loyalty programs to create consumer profiles, so that the travel products are well suited to them (personalised). Often resulting programs and offers incorporate not only their own business (hotel, attraction, etc.), but increasingly partnerships with other activities and the destination itself (33). This growth in data capture has significant implications for the way research is performed within travel and tourism (34).

As investments are needed to benefit from these opportunities, large firms have arguably a better position to collect and analyse consumer data. SME tour operators may have an advantage if they possess younger, more dynamic staff or a more open, change-oriented internal culture, or specialists in (online) data analysis. Furthermore, profiting from data analytics requires more than ‘hard’ ICT and statistical skills. Human sensitivity to privacy concerns and the optimal content and degree of customisation is also crucial. Cultural norms of privacy are changing and developing, so there is no hard-and-fast standard that SMEs can expect to carry decades into the future. They must be aware of both laws and customers’ evolving expectations as far as data privacy is concerned.

2.2.2. Increasing collaboration

Tourism products can be offered to customers from a more closely, dynamically interconnected network of businesses, including collaborations between individual entrepreneurs, SMEs, and international conglomerates. ICT encourages collaboration between competitors providing platforms for communication whilst reducing costs. This is demonstrated by the deepening network of connections between suppliers (accommodation, transport), information providers (destination management organizations) and intermediaries (agents, operators). In general, it is suppliers who are first recruited by intermediaries such as Amadeus3, which are now considered ‘must-have’ industry standards. Although they have become a critical part of service delivery, their relationship with traditional distributors is more ambiguous, often acting as both competitor and co-coordinator (8).

2.3. Conclusions

The strong increase of ICT applications in tourism information searches, booking and experience, affect SME’s by deepening consumer participation in reviewing and developing products and by changing production processes. Consumers increasingly add to the content and value creation on websites and platforms and make use of such peer information. This development is fuelled by the rise of social media. Furthermore, ICT enables a global

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3 A global distribution system for travel tickets and products.
outreach for SMEs at relatively low cost. Especially in travel product distribution, these SMEs quickly expand or consolidate.

In this increasingly customer-empowered environment, the challenge for marketers is to manage and direct customer engagement by using social media in deliberate, striking, proactive and emotionally intelligent ways. User-generated content (UGC) aside from reviews is increasingly intertwined with travel marketing strategy. Faulty or deliberately fraudulent reviews made by fictitious consumers are an increasing problem. Location based Services (LBSs) are an important tool for DMO’s to channel information about their destination or specific market sections. They also help SMEs to reach out to geographically specific markets.

Besides empowering customers, ICT has changed production processes by integrating services, reducing costs, facilitating price transparency and offering more flexible supply. The most profitable business in ICT is gained by tracking personalised consumer data (e.g. Google). Tracking is increasingly used in accommodation and may include destination information as well. Tourism products can be offered to customers from a more closely, dynamically interconnected network of businesses, including collaborations between individual entrepreneurs, SMEs and international conglomerates. There is a clear DMO (Destination Marketing Organisation) opportunity to integrate destination information into existing networks and collaborations such as with search and booking engines.
3. **EFFECTS ON THE TOURISM INDUSTRY**

### KEY FINDINGS

- Effects of ICT on the channel structure of the tourism industry include the growing dominance of a few large online travel agencies and Google.
- Effects of ICT on the market structure of the tourism industry include the low cost of information and low barriers to entry.
- Limited resources in traditional-model businesses in tourism hamper innovation.
- Success stories show an intersection between technical innovation, sensitivity to customer behaviour and creativity.

This section gives an outline of the most successful ICT and tourism services practices and in particular an assessment of the penetration of ICT technologies in tourism on different levels. The effects of ICT on tourism SMEs in Europe include impacts on the channel structure (value chain) and market structure. These are reviewed in detail before describing a small number of successful innovations and businesses that have used ICT in innovative and profitable ways.

### 3.1. Effects on channel structure

Channel structure is the marketing network or system through which suppliers connect with consumers or other suppliers, in this case, delivering information about products and services. As the use of ICT has increased it has altered the balance of power within travel and tourism distribution channels (8). Consumers are now able to compare alternative products quickly and cheaply as a continual or circular process until the moment they decide to purchase (5). OTAs, such as Expedia, are particularly suited to profit from this circular information search process.

#### 3.1.1. Online Travel Agents (OTA)

Online travel agents have profoundly changed the traditional channel structure of tourism product distribution by travel agents, tour operators and destination marketing organisations (DMOs). As well as replacing the role of brick-and-mortar travel agencies, OTAs serve as a one-stop shop for a variety of product booking combinations as well as information. In that sense, OTAs have also replaced tour operators, review websites, hotel websites, airline ticket offices, destination marketing websites and websites of some on-site attractions. For example, hotels find themselves in a position where increasing portions of their booking are through third party websites and often at substantially discounted prices. For any destination they enable consumers to compare prices, facilities, location, etc., in a single search (35, 36, 37, 30). The evolution of metasearch engines, such as Trivago, has taken this development to the next level.

OTAs have experienced a dynamic of consolidation over the past few years, as large early entrants (e.g. Travelocity and Expedia) acquire each other and grow larger and more dominant. In fact, the two conglomerates Expedia and Priceline now own the large majority of well-known OTAs. At the same time, new entrants such as TravelBird and Eliza Was Here enter the market by innovating ways of presenting information or facilitating customers’ decision-making processes.
3.1.2. The dominance of Google
A great deal of power in online travel booking is concentrated within a single company, Google. Because Google dominates Internet searching and advertising markets, any single change in their algorithms poses great risks to businesses that trade online, as most European travel SMEs now do. Although the key Google algorithms are considered trade secrets, the most successful tourism SMEs have an informed understanding of how they work and a firm grasp on the principles of Search Engine Optimisation (SEO), the process of making a site show as prominently in Google search results as possible. Another approach is to circumvent the issue with personalised service that customers refer to one another through other social media or offline channels. A third approach is to develop innovative partnerships with large, dominant companies that have the resources and position to turn SEO to their advantage.

3.2. Effects on market structure
Market structure is the interconnected characteristics of a market, such as the number and relative strength of buyers and sellers, and the level of competition. Changes to market structure, rather than channel structure, have been the underlying drivers of change to the balance of power in the tourism industry (8). Simply put, the consumers now have the power and SMEs offering tourism products are best positioned when they innovate from the perspective of their customers’ future behaviour. The developments in ICT detailed in Chapter 2 have influenced market structure by freeing information, lowering barriers to market entry and limiting resources for research and development among existing SMEs.

3.2.1. Information has become free
Consumers are no longer willing to pay even small charges for information that is available free online. This makes new business models absolutely necessary. Information as the single value proposition is no longer worth paying for. Instead, convenient information must be coupled with a unique value proposition, such as convenience of booking, personalisation or exclusivity. For example, there are DMOs who would like to earn from hotel bookings and so couple their information with accommodation sales (38).

3.2.2. Low market entry barriers
There is a rapid expansion of intermediaries in the marketplace (9, 4). Making access to information is increasingly being taken over by new entrants to the market such as Google, but also by a lot of small companies. New technology creates new business opportunities, While traditional value propositions such as information no longer hold appeal, the growing diversity of tourism destinations, customer segments, markets and experiences opens opportunities to new levels of intermediation, personalisation, and even new types of tourism experiences such as surprise holidays, where customers book discounted holidays without choosing a destination. They learn the destination only after they have started their trip. Because such business models are based on access to information and the social spread of market awareness, enormous investments are not needed to enter the market. Some technical expertise, creativity and a profound understanding of the customer are sufficient for a tourism start-up to make impressive market inroads. This is a shift in market structure where previously significant capital investment was needed to enter the tourism market.
## Table 1: Proportion of travel and accommodation booked online

<table>
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<th>Country</th>
<th>2008</th>
<th>2012</th>
<th>% change</th>
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<td>15.0</td>
<td>33.0</td>
<td>120.0</td>
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<td>Belgium</td>
<td>11.0</td>
<td>28.0</td>
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<tr>
<td>United Kingdom</td>
<td>35.0</td>
<td>51.0</td>
<td>45.7</td>
</tr>
</tbody>
</table>

Source: Mintel, 2014

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3.2.3. Limited resources in SMEs

Two of the main constraining factors within SMEs are limited knowledge among staff and access to capital (21). A lack of resources has also been identified within tourism SMEs. Although new firms are less constrained by outmoded business models or working culture, they require additional support when starting up. Tourism and hospitality businesses are notably slow in the take up of new technologies. In the case of SMEs, this has been compounded by the plethora of alternatives available, for online booking, marketing, etc. The constant upgrading, introduction of new technologies, in addition to market structure and cost, all present additional barriers to the adoption of ICT by tourism SMEs (7).

3.3. Some success stories

The 2015 Travel Weekly Power List of travel agents (ranked by sales) is topped by two global OTAs; Expedia Inc. and The Priceline Group, with annual turnovers’ of around $50 billion, they are almost double that of the third placed company American Express Travel/American Express Global Business Travel ($29 billion). The rapid expansion of both companies has largely been driven by acquisitions.

3.3.1. Global OTAs

Expedia

The Expedia family of online travel brands represents a large-scale consolidation of numerous Online Travel Agents. Founded nearly 20 years ago within Microsoft, Expedia grew both in direct customers and by acquiring competitors, most notably Travelocity and Orbitz. Annual revenues are a little over €50 billion. Expedia is neither an EU based company nor an SME. However, it represents a realisation of the consolidation process that online tourism distribution SMEs go through. Furthermore, other European tourism SMEs, such as accommodation providers, must contend with Expedia as a partner. In short, it is the sort of company, alongside competitors Priceline and Google that dominates the market.

The Priceline Group

The Priceline Group have grown rapidly in recent years to rival Expedia Inc.; their portfolio includes Booking.com, priceline.com, and KAYAK (a metasearch engine, see section 3.3.4 below). As well accommodation, the company offers flights, cruises and car rental. Much of the company’s success has been built on the use of mobile apps and its ‘name your own price’ function, whereby travellers bid for rooms allowing hotels to discount without actually advertising promotional rates.

Orbitz

Another global OTA, as well as the Orbitz brand, it has amongst others the CheapTickets.com and ebookers.com sites, all of which offer a range of services including accommodation, flights and car hire. It is the ebookers.com site that is best known in Europe, which offers a full range of services.

Travelocity

Part of the Sabre Holdings group, the Travelocity brand is probably best known in North America. However, it also owns the lastminute.com brand that is well known in Europe. It offers a wide range of services including flights, accommodation and cruises, across North America, Europe and Asia, with a reported 5.3 million unique visitors each month to its sites.
3.3.2. Regional OTAs

TravelBird
TravelBird is a rapidly growing online tour operator based in Amsterdam, but active in 17 European countries. They specialize in innovative discount packages that change in composition as well as price every day. The key value proposition in their model is ‘seeing the wood for the trees’ of low-cost offers on behalf of their customers. The offers exist only for 24 hours, so the booking experience appeals to the impulsive booking behaviour of customers experienced with booking online, but overwhelmed by information. Their growth in turnover, investment and valuation is due to their customer-centred interface and their focus on the rising interest in last-minute and spontaneous holiday booking behaviour.

QTravel
Operating since 2010, QTravel is a Polish OTA that sells vacation packages from 50 Polish tour operators. It has been averaging year-on-year revenue growth of about 10%, and has about a third of the traffic as leading rival Travelplanet. It earns revenue in two ways: as a travel agent, it receives a reservation fee from tour operators (between 8% and 17%, depending on the product and agreement). It also provides an application programming interface (API), where the price is individually negotiated depending on the way API is to be used.

GoVoyages
One of France’s main OTAs, which also operates in nine other western European countries, offering a full range of services under its GOVOLO brand.

3.3.3. Accommodation Specialists

Airbnb
The sharing economy is a small, but rapidly growing, trend in the accommodation and transport markets. Businesses such as Airbnb offer technological platforms where private owners of idle resources offer to share or in fact sell use of these resources to customers seeking a discounted or more personal experience compared to, for example, hotels and Bed & Breakfast. Airbnb, for example, serves as an online marketplace for private owners who would like to rent spare rooms or other underused properties. Effectively, these are seen by customers as inexpensive, value-added or more culturally rich alternatives to mainstream tourist accommodation.

Bedandbreakfast.eu
Bedandbreakfast.eu is a niche online review and booking portal with a wide range of bed and breakfasts (B&B’s) in over 200 countries. The Dutch company started in 1999 with the purchase of the name bedandbreakfast.nl. Currently it employs 15 people. The revenue model is based on membership subscriptions from bed and breakfast businesses who, as well as a listing on the site, benefit from other services such as Reservation Manager, Marketing Tools and a listing on Google Map.

Nightswapping
Nightswapping is a community already active in 150 countries. It has its origins in France with founder and CEO, Serge Duriavig. The site has a worldwide reach with 70,000 members. Like Airbnb, the community is based on the principle of exchanges. Community members build points by letting people sleep in their homes and these points can be exchanged elsewhere.
3.3.4. Metasearch engines

Improvements in technology have seen the development of powerful metasearch engines such as KAYAK, Trivago and Skyscanner. These search engines aggregate the results of other search engines, including OTAs, car hire, flights, hotels and package holidays. They use the search terms entered by the consumer to search other websites to find the best match to the customers’ requirements. This development enables consumers to complete a wider search from a single site.

3.4. Conclusions

The effects of ICT on tourism SMEs in Europe include impacts on the channel and market structure. Effects on channel structure include creating a more open-ended (circular) search process, empowering consumers to better compare alternatives at almost any time up to just before the purchase. Taking advantage of this circular search process, OTAs (Online Travel Agents, like Expedia) and Google now have a very strong position in online booking, holding accommodation and transport companies at a competitive distance. This causes high fees for the services delivered by most OTAs to the SME companies that form a destination, and a saturated market place for all but the most creative SME travel distributors. This trend is caused by a natural mechanism in which the ‘winner takes all’ due to the global reach of booking information sites, so that single destination or even single country platforms fail to really compete. Aggressive merger strategies by the largest companies accelerate this trend.

Current tourism research literature indicates that the changes to market structure, rather than channel structure, have been the underlying drivers of change to the balance of power in the tourism industry. SMEs offering tourism products are best positioned when they innovate from the perspective of their customers, which often requires substantial creativity combined with technical innovation.

Market structure innovations mean that there is strong concentration of intermediaries as well as numerous start-ups with sometimes important advances. SMEs that produce tourism services and products often lack the resources and expertise to become ICT innovators, specifically, their management often lacks the expertise to effectively make use of the thousands of local ICT innovators. Furthermore, there seems to be a lack of mutual understanding because of cultural differences in management styles and knowledge. While some (especially technical) companies take a creative, innovative approach, others (especially traditional tourism businesses) remain conservative and compete mostly on price.
4. POLICY RECOMMENDATIONS AND CONCLUSIONS

**KEY FINDINGS**

- Goals in EU policy related to competitiveness, sustainability and technology are affected by ICT developments.
- Key recommendations for EU policy include encouraging research, education and cooperation.
- Ultimately, the most effective policies will bridge the gap between traditional tourism business models and technological innovators.

The impacts of information technologies on tourism SMEs in the EU are considerable and multidimensional. There are also issues with accessibility to travel products for certain groups of travellers with no or limited access to online booking systems and Internet (40). Public policy action is required at all levels, local, national and European, as it is an important stimulator of SME development (41), facilitating culture change in tourism SMEs with traditional business models, initiating research and development of digital infrastructure, encouraging innovation and entrepreneurship and promoting cross-sector cooperation. In this chapter policy recommendations are proposed which address the changes that challenge tourism SMEs in the EU.

4.1. European tourism policy

4.1.1. The Digital Single Market

The strategy for Digital Single Market proposed by the European Commission in May 2015 sets out key actions on digitisation policy for the EU population and businesses. It is one of ten priority areas for the current European Commission (42), to promote growth within the region. Connectivity is a crucial element of this policy, which will be underpinned by new legislation to standardise telecommunication provision throughout the Union, by addressing data-protection law and restructuring the management of radio waves. It is expected that this will encourage an increase in cross-border trade via the Internet, which at present is characterised by a low percentage (15%) of consumption on an inter-state basis (43).

Three pillars shape the policy area:

1) “Better access for consumers and businesses to digital goods and services across Europe”,
2) “Creating the right conditions and a level playing field for digital networks and innovative services to flourish” and
3) “Maximising the growth potential of the digital economy.” (44)

Of particular relevance to the tourism industry are the harmonisation of consumer laws regarding cross-border e-commerce; the removal of the ‘geo-blocking’ practice within states, which at present prevents consumers visiting websites in other EU countries and can restrict cross-border competition; reviewing competition issues between states; developing a more homogenous copyright law in order to make cultural content available to people travelling between states; overhauling telecoms, social media and apps in order to provide for smaller businesses and ‘level’ the playing field and also provide a focus on data-sharing, research, transportation and skills, which will enable ICT to become more accessible at all levels.
The Communication document (45) states that a new ‘e-Government Action Plan (2016-2020)’ will interconnect European and National portals by development of a ‘Single Digital Gateway’ which will be multi-functional for businesses and EU residents, and accessible to all.

4.1.2. Intersection of ICT developments in tourism with EU tourism policy goals

Technological advances in ICT allow new tourism intermediaries to enter the European travel and tourism market from anywhere in the world. This provides a challenge for EU tourism policies as the level and strength of regulation in the host region may impose lower costs. This will have a direct impact on the competitiveness of European tourism SMEs. Equally, with increasing use of these platforms to make decisions, the lower regulation may result in consumers making less than optimal decisions because of a reduced obligation to inform them of the environmental, social and economic costs of their purchases; as a consequence some sustainable tourism products may also disappear if they are outcompeted on technological or user experience.

**Figure 1: Overview of relationships between ICT effects on SMEs and tourism policy challenges**

The continual development of ICT poses considerable challenges for EU tourism policy, in terms of economic, technology and market competitiveness. These challenges result from the globalisation of the distribution channels where even location-based services, which can substitute for local tourist information offices, can be provided from anywhere in the world. The regulatory and administrative burdens that affect competitiveness can be influenced by research and development of digital infrastructure, as well as support for innovation and entrepreneurship. The latter could also create new products addressing market challenges. Customers’ needs could be addressed by research and development of digital infrastructure. Culture change in tourism SMEs to focus on their customers and their use of technology is also recommended. Finally, new networks and co-operation between tourism firms could address customers’ current needs more effectively. However, the technological challenges are the central point in ICT developments. The recommended responses of the European Union to ICT developments in tourism SMEs are those mentioned above. They are support for: change in the commercial cultures and attitudes of tourism SMEs; research and development into digital infrastructure; innovation and entrepreneurship; as well as networks and cooperation to address the technology challenges. More detailed recommended responses are to be found in the next section.
4.2. A set of responses to ICT developments

Technological change requires European SMEs that wish to remain in tourism to adopt a flexible, challenge-embracing attitude. Businesses must be prepared to adapt to technological changes, especially as these have the potential to restructure the industry. Those failing or unable to adapt may find themselves left behind or worse still out of business (4). Many SMEs are motivated to focus on short-term goals, maintaining shrinking business models constrained by past successes or traditional, rigid labour laws. These need not restrict company cultures, but require well-trained, well-connected leaders willing to manage for the longer-term.

Traditional tourism distributors such as SME tour operators and bricks-and-mortar travel agencies have little chance of survival in the EU without good digital infrastructure. Research and development is needed to let the travel consumer contribute to content and product development. Niche market businesses have an easier time adapting to this business model, but more general travel providers must also take into account the power of today’s travel consumers and both need to take forward the development of digital infrastructure and processes. Further ICT developments are likely to be needed to facilitate this process, for example the app developed by Stickdorn within an EU-supported project\(^5\) (46). The development of such tools must be customer-focussed. In addition, software development and data analysis need further support from subsidies and investment programmes, which will also require the cooperation of SMEs, although research funding alone is not enough to address the issue. Funding for knowledge transfer such as continuing education is also needed, for example, the use of real time information sharing can improve communication between tourism service providers and consumers enhancing the tourist experience through greater customisation and personalisation of services (34). These technologies require development in some cases (e.g. lifestyle decoding) and training in others (e.g. user-generated content in marketing).

The challenges facing traditional tour operator and travel agency SMEs in Europe do not mean that there is no place left for SMEs in tourism. In fact, most of the businesses in tourism will continue to be small. However, the market definitely demands an innovative attitude from these businesses. Thus, if creative, innovative and entrepreneurial efforts are included in the picture, the future of tourism SMEs in the EU is promising. It depends profoundly on innovation and entrepreneurship.

Finally, the success of tourism SMEs in the EU depends on new, closer forms of cooperation with both technology conglomerates as well as with one another. Many SMEs are hindered by a lack of resources, particularly in ICT. This reduces their ability to make optimum choices for their businesses. The development of networks, by industry associations, for example, would help to raise the level of expertise in these areas by sharing knowledge and experiences (41). To address changes in production processes, tourism SMEs must cooperate to integrate e-marketing activities across media, channels and technologies within a collective regional marketing strategy, which would enable them to benefit from economies of scale improving competitiveness. Destination marketing organisations held this function prior to the recent IT revolution in tourism distribution, with appropriate investment and facilities; they could again take a coordinating role. A significant challenge is to provide tourism SMEs with a common digital infrastructure, reducing their dependence on third-party providers, in this case large software conglomerates such as Google (7).

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\(^5\) The app ExperienceFellow (originally MyServiceFellow) allows companies to mobilize customers as co-investigators in mapping their journey of interactions during a service experience. See [http://www.experiencefellow.com](http://www.experiencefellow.com).
However, partnerships with technology conglomerates can offer dynamic solutions to practical technical problems, for example, Google Now\(^6\) offering pre-emptive searches of local facilities in partnership with travel and tourism search engines such as Booking.com or Hotels.com, reducing the need for dedicated apps (16).

### 4.3. Conclusions and recommendations: An ICT and tourism SME policy

#### 4.3.1. Conclusions

The tourism industry is undergoing a dramatic change in which technology empowers consumers to engage in information, booking, and reviewing processes previously performed by intermediaries. Many tourism SMEs in Europe still try to fulfil these intermediary functions, while numerous start-ups, which are usually based on technological developments, fit customers’ present tourist behaviour better. Thus, changes in ICT pose significant risks to tourism SMEs using traditional business models, but create opportunities for new ones, especially those focused on technical solutions to problems such as price wars, data analytics or highly personalised customer experiences. These opportunities exist in travel distribution, destination management, accommodation and industries related to tourism such as care in the context of health tourism.

Trends in the tourism industry related to ICT include deepening consumer participation and changing production processes. Consumers increasingly add to the content and value creation on websites and platforms and make use of such peer information. Tourism SMEs must now channel customer engagement by using social media in deliberate, striking, proactive and emotionally intelligent ways. User-generated content (UGC) aside from reviews is increasingly intertwined with travel marketing strategy, despite doubts about the long-term power of online reviews. Location Based Services (LBSs) are an important tool for DMO’s to distribute information as well as helping other SMEs to reach out to geographically specific markets.

ICT has changed the production processes by integrating services, reducing costs, facilitating price transparency, and offering more flexible supply. There is profit in tracking personalised consumer data, which are increasingly used in accommodation services and may include destination information as well. Furthermore, tourism products can be offered to customers from a more closely, dynamically interconnected network of businesses, including collaboration between individual entrepreneurs, SMEs, and international conglomerates.

As a result of changes in the channel structure, OTAs (such as Expedia) and Google now have a very strong position in online booking, thereby shutting out accommodation and transport companies to a certain extent. Thus, for travel bookings, there is a saturated market place for all except for the most creative SME travel distributors. Due to the global reach and aggressive merger strategies of OTAs, single destination or even single country platforms cannot successfully compete. However, changes to market structures have been even more influential. SMEs offering tourism products are well positioned when they innovate from the perspective of their customers, which often requires substantial creativity combined with technical innovation. While a few large intermediaries dominate the travel distribution market, start-up SMEs sometimes make substantial gains with innovations in

\(^6\) Google Now is an App that in addition to reminding the smartphone/tablet user about important tasks and dates, it is able to preempt user desires and needs by learning about their habits. It then uses this to suggest information that it thinks they might be interested in, such as nearby attractions, hotels or recent film releases.
customer experience or new business models. Unfortunately, tourism SMEs often lack the resources and expertise to become ICT innovators. Moreover, traditionally-oriented tourism managers lack the expertise to make effective use of the thousands of local ICT innovators and start-up enterprises due to a gap in understanding or company culture between these two worlds.

4.3.2. Recommendations for EU policy

The principle of subsidiarity should always be respected, however, given the global nature of many of the recent development in ICT, there is a need for Europe to respond at a regional level. The first step in this has been taken with the issue by the European Commission of *A Digital Single Market Strategy for Europe*.

The recommendations below are divided into three key areas, business environment, research and education.

**Business environment**

- Adoption of the policy recommendations of *A Connected Digital Single Market* to improve pricing transparency, security and, most importantly, accessibility to online services across European borders. For example, tourism SMEs invest in mobile online presence (apps, social media pages, et cetera) only to find the most lucrative tourists avoiding them for fear of roaming charges. A digital single market would thus improve return on investment in technology for SMEs in a variety of ways.

- The development of EU guidelines to create a level playing field between technology-based start-ups entering the market and legacy tourism businesses, as well as consumer data safety and security. The aim should be to prevent anticompetitive or uninformed infringement on tourists’ privacy through technology.

- Create a European website resource (hosted on europa.eu) detailing tourism technology developments, where these are active and what they offer in cooperation with local governments. This will help SMEs to contact these platforms and discuss matters of taxation, regulations, complaints, liability and insurance.

- The website resource should also have a database that contains good (and bad) practice demonstrating the opportunities of technology and innovation in enhancing customised experiences, develop new products and regulate competition. Labelling and certification are not useful here; such a process is too static and difficult to communicate to customers, who will find it lagging behind the technological developments that drive their service experiences. These resources could be updated in partnership with European industry organisations.

**Research**

- To monitor the development and impacts of ICT on tourism SMEs in the EU and the mechanisms behind these impacts and developments.

- To develop new knowledge or new applications of existing knowledge, which have been identified by the EC as requiring significant investment but essential in achieving Europe’s digital ambitions.

- On how environmental and quality labels could best be introduced to new technological platforms for tourism and travel product distribution.
On the development of new technologies for tourism SMEs to track and interact with their customers, as well as technical standards on how to network and connect tourism SMEs to emerging technology platforms to make cooperation based on technology easier.

These could be developed by collaboration between the European Commission, industry and research centres.

**Education**

- The development of a customised education programme to reach existing SME owners and staff, in cooperation with the main European tourism education universities and institutes and the tourism industry. The aim would be to bring together the two worlds of SMEs and ICT; with a focus on guiding tourism SMEs through the process of change management. This supports the Commission’s initiative to improve digital skills and expertise as part of all future skills and training initiatives.

- Encourage the development of a strong ICT technology element in tourism and hospitality management courses; perhaps through the development of an ICT accreditation scheme. This should promote dedicated ICT courses within tourism programmes including technology and the creation of applications by the students themselves. This would especially attract students with a high interest in technology and affinity to travel and tourism, a group now absent in tourism SMEs (and largely in current tourism and hospitality schools), which has resulted in the ‘virtual take-over’ by ICT companies of tourism SME marketing and product development.
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