Journal of Tourism Futures

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Making sense of the future

Rise and shine its marijuana time! Says Wright (2019). Across the world attitudes are changing and Cannabis has become a tourism experience, whether it is the Muscle beach in California or the coffee shops of Amsterdam. The paper explores the future potential of a UK cannabis tourism market offering original ideas and exploring a potential future cannabis industry in the UK. The purpose of this paper is to explore a potential strategy in which the UK could integrate cannabis across the country, to encourage tourists to travel to less visited towns and cities. Wright’s takes a sensitive topic and uses the scenario approach to demonstrate what the future could be. This the purpose of future studies for policy makers, decision and the leaders of the tourism industry. As researchers we have a responsibility to make sense of complex issues and uncertainty. Scenario planning is a methodology which brings structure and a framework in to allow sense making (Dervin, 1998).

Scenarios are illustrations of possible future pictures and historically of alternative futures. The key purpose of scenario planning is to change/alter mental models through dialogue, conversation and decision making as a participatory group process thus contributing to learning and an increased capacity to think in innovative and challenging ways (Bradfield, 2008). Scenario planning theory places strong emphasis on revealing and reconstructing mental models. Theorizing is based on the assumption that organisations are systems of feedback loops that spread the dominant mental models and cultural artefacts through interaction (Huff and Jenkins, 2002; Weick and Roberts, 1993; Yeoman and McMahon-Beattie, 2005).

The future is unknown, scary and threatening but at the same time surprising, hopeful and imagination. Global futures face many challenges, whether it is climate change, energy, ageing populations but at the same time the future offers tourism new markets, new tourists and development. Tourism has never been more conscious about its future with changing attitudes towards sustainability. Tourists have been better connected to the world through mobility, advances in technology and in real terms, the falling cost of travel. For thousands of years we failed to understand, predict, control and manage the future of tourism. But today, there has never been a greater desire to understand the future of tourism whether it is the UNWTO 2030 forecasts (UNWTO, 2011) or the OECD Megatrends (OECD, 2018). There has been a movement and realism that the predicting and understanding the future is important, as it is the only form of tourism that we can influence, prepare for and action.

This is what the Journal of Tourism Futures is all about, making sense of the future in order too:

- to inspire the tourism industry and academic community about the future of tourism;
- the dissemination and formulation of the body of knowledge called tourism futures to practitioners, educators, researchers and students;
- to provide an international forum for a wide range of practical, theoretical and applied research within the field of tourism futures;
- to represent a multi-disciplinary set of views on key and emerging issues in tourism futures;
- to include a cross-section of methodologies and viewpoints on research, including quantitative and qualitative approaches, case studies, and empirical and theoretical studies;
- to encourage greater understanding and linkage between the fields of study related to tourism futures; and
- to publish new and original ideas.
Therefore, the scope is:

- To serve and reflect the tremendous growth in research and discussions in tourism futures.
- To take a broad and multi-disciplinary approach to the future, whether it is short term or long term or economics or consumer behaviour. However, the journal will not comprise its position that all papers must be about the “future” and “tourism”.
- To encourage papers that stretch the current boundaries of the fields and develop new areas and new linkages with other relevant areas or combine or introduce new approaches and methodologies.
- To welcome creative and innovative approaches and papers that introduce new concepts and ideas.

References


Cannabis and tourism: a future UK industry perspective

Daniel William Mackenzie Wright

Abstract

Purpose – The purpose of this paper is to offer original ideas into a potential future cannabis industry in the UK. This paper presents novel approaches regarding the potential existence of cannabis for the tourism industry. It presents an idea in which the UK Government could produce, distribute and control the industry. The proposed idea presents a scheme in which the UK could encourage regional tourism (inclusive to domestic and international travellers) through a controlled but innovative cannabis market scheme. This paper presents a future scenario aiming to encourage dialogue and critique, at a time when attitudes to cannabis are changing.

Design/methodology/approach – This research takes a scenario narrative approach in presenting and exploring a potential future cannabis market in the UK. The importance of narrative writing as a method is recognised by Lindgren and Bandhold (2009), who identify the significance in telling a story to the reader. Taking a pragmatic approach, embracing diverse philosophical methods, this research explores past and current trends via a mixture of secondary data sources to create and present a scenario narrative of the future.

Findings – This paper identified that trends in legalising cannabis for cultivation, medical and recreational purposes continue to become more liberal globally. However, cannabis laws mainly focus on the use for residents. Consequently, domestic tourism markets have the potential to grow. However, there is limited consideration regarding the potential for international tourism cannabis markets. Thus, the findings of this research are based on the potential for the UK to implement and promote a cannabis industry for international travellers.

Originality/value – This paper offers original ideas in exploring a future cannabis market in the UK, one where regional tourism is considered. The paper presents a novel approach that encourages domestic and international tourists to engage with the cannabis industry by navigating a well-managed, local approach to supplying cannabis in the UK.

Keywords Narrative, Tourism, UK, Future, Cannabis, Scenario

Paper type Research paper

Introduction

Rise and shine its marijuana time! Across the western world, attitudes towards cannabis are changing. There has been a growing willingness amongst various political parties and their advisors to allow the use of cannabis for medical purposes, and for some countries the legalisation for personal, recreational use. Current trends point to more liberal attitudes towards cannabis emerging in some cultures. Consequently, a process of normalisation in the wider social society between users and non-users towards cannabis consumption could emerge over time. In the USA, the recreational use of cannabis remains illegal under federal law for any purpose, by way of the Controlled Substances Act of 1970. However, at state level, policies regarding the medical and recreational use of cannabis vary greatly, with nine states allowing the use of recreational cannabis, contrary to federal law. In Uruguay and the USA international purchase and consumption of cannabis remains illegal, whilst Canada who in 2018 legalised cannabis will allow provinces to make their own state laws regarding tourist consumption (at the time of writing, there was limited information available regarding the position taken across the country). In Amsterdam, the Netherlands, a popular cannabis tourism destination, cannabis remains illegal, but the cannabis market continues to be a pull for domestic and international tourists. Cannabis continues to be a popular recreational drug in the UK. Evidence across the globe highlights that tourist travel purposely to destinations to consume cannabis, thus, this paper considers cannabis’ what approach could the UK tourism market apply towards cannabis.
Does legalising cannabis offer new possibilities for UK tourism? This paper explores the future potential of a UK cannabis tourism market, in the form of a scenario. This paper offers original ideas exploring a potential future cannabis industry in the UK. The purpose of this paper is to explore a potential strategy in which the UK could integrate cannabis across the country, to encourage tourists to travel to less visited towns and cities. It presents an idea in which the UK Government could produce, distribute and control the industry. The proposed idea presents a scheme in which the UK could encourage regional tourism (inclusive to domestic and international travellers) through a controlled but innovative cannabis market scheme. It is worth noting, that this market is not suggested to be the dominant future tourism market in the UK. The purpose of this paper is to present a future scenario that will encourage dialogue and critique, at a time when attitudes to cannabis are changing. The structure of this paper initiates with an introduction to cannabis, then it considers global attitudes and approaches to cannabis focusing on cultivation, medical and recreational uses before focusing on more recent developments within the UK. Next, the methodological approach is explained, followed by the future scenario; Cannabis County Competitive Strategy (CCCS). To draw discussions to an end, considerations towards the importance of developing a cannabis culture are expressed.

An introduction to cannabis

Humans have co-evolved with cannabis for at least 12,000 years. We have changed cannabis and cannabis has changed us. (Stanford, 2016)

Once upon a time, according to a story recounted by the Islamic chronicler al-Maqrizi (1364-1442) in AD 1155, the founder of the Persian Sufi Hyderi sect, left his cell in a monastery in the mountains near Neyshaur, in the Khorasan region of north-eastern Iran, and went out for a walk. Discovering a plant standing unwithered by the blazing sun, he grew curious and wondered how it withstood the desiccating heat, so he cut a few leaves and chewed on them as he went on his way. Usually a taciturn man, he returned in a fickle frame of mind, with a smile on this face. Swearing his fellow monks to secrecy, he told them what he had discovered. Thereafter, it is said, he remained in a capricious mood until his death sixty-six years later. What he had purportedly discovered was a drug from a common plant. The plant was cannabis. (Booth, 2004, p. 15)

It is beyond the scope of this section to provide full coverage of the history of cannabis, for a more detailed explanation see Martin Booth in Cannabis: A History. As for its name, “Cannabis is the generic name for hemp, an adaptive and highly successful annual found growing throughout the temperate and tropical zones of the world” (Booth, 2004, p. 15). The origins of cannabis are debated, but many studies suggest that it evolved in the temperate climates of central Asia, close to the Irtysh River which flows from Mongolia into the western Siberian lowlands near the Gobi Desert in China’s Xinjiang province, north of Tibet (Booth, 2004). According to Stanford (2016), “The origins of agriculture and civilisation itself are linked to cannabis, and all archaeologists agree that cannabis was grown by our first ancestors to begin farming in Asia”. Whilst Abel (1980) suggests that marijuana, hemp or cannabis is humanities oldest crop, sown for more than 12,000 years and potentially up to 30,000 years ago. As for the terms used (cannabis, hemp and marijuana) there are differences between them, with the names related to specific parts of the same plant. Stanford (2016) recognises that there continues to be some confusion about the difference between the three terms, which all come from the same plant species; the scientifically Latin termed Cannabis Sativa. Additionally, various varieties such as Cannabis Indica are also the same species, originally bred in India. As for which part of the plant they come from, from a medical and recreational perspective, most of the cannabis varieties used are cross-breeds from both indica and sativa varieties (Stanford, 2016). Stanford clarifies that “according to US law, hemp is the stalks, stems and sterilized seeds of cannabis sativa, and marijuana is the leaves, flowers and viable seeds of cannabis sativa”. Thus, in the paper the three terms, cannabis, hemp and marijuana are often inter-changed.

Medical cannabis

It’s a strange thing when you make nature illegal”. (Joe Rogan, Pot Monk, 2018)
Bone and Seddon (2016, p. 58) note, “The global prohibition of cannabis cultivation, supply and possession might be considered to present an insurmountable barrier to the full exploration of the therapeutic potential and public health benefits of medicinal cannabis consumption. Despite this, examples of innovative approaches have emerged around the world, although some jurisdictions, notably the UK, have provided less fertile ground for them to flourish in”. Throughout the twentieth century the use of marijuana has often been driven by its euphoric effects rather than its potential medical benefits. Consequently, the psychological and behavioural effects of marijuana have often been the concern for public officials (Joy et al., 1999). Mack and Joy (2000) suggest that the use of medical marijuana from a scientific perspective has often been masked by the drugs legal status. Consequently, debates from opposing fields seem to be discussing a different drug. Furthermore, Mack and Joy (2000) state that this can result in the following statements being presented for either pro users and anti-users. These statements are, according to the California Narcotic Officers (1996, p. 2) association “there are over ten thousand documented studies available that confirm the harmful physical and psychological effects of [...] marijuana”. Contrary, pro users could argue that, “the cannabis plant (marijuana) [...] [has] therapeutic benefits and could ease the suffering of millions of persons with various illnesses such as AIDS, cancer, glaucoma, multiple sclerosis, spinal cord injuries, seizure disorders, chronic pain, and other maladies” (Mathre, 1997, p. 1).

Be it in within the academic sphere or popular culture and media, debates regarding the medical benefits of cannabis differ. More so, there is every chance that people will bring to the debate their own bias and personal experiences and opinions in relation to cannabis. Importantly, there is scientific and social research exploring the medical and social impacts of cannabis. Bone and Seddon (2016, p. 59) in their paper, employing a human rights perspective, seeking to open dialogue, suggest, “to rethink drug policies in a more thoroughgoing and potentially radical way, so that a more fully public health approach to the issue of the therapeutic use of cannabis can be developed which is not constricted by the drug prohibition paradigm”. The authors further note, “a more expansive conception of health, in contrast, appreciating both internalist and externalist views, could lead to a public health approach which more effectively balances individual and collective interests” (Bone and Seddon, 2016, p. 59). For now, the arguments for and against are likely to continue as new research form either side of the debate emerges. From a UK perspective, it is worth noting that the UN’s International Narcotics Control Board noted that in 2016 the UK was the main producer and exporter (mainly to the USA) of a cannabis-based medicine named Sativex. The drug is used to treat muscle stiffness and spasms in people with multiple sclerosis. Sativex, which the Home Office do not define as cannabis, is available throughout the UK but only provided free on the NHS in Wales (BBC News, 2018a). It is not possible for this paper to discuss all the potential pros and cons of medical cannabis in relation to the many medical debates that exist. What is important is to recognise that some countries in western society are beginning to accept the use of cannabis for medical purposes, and more so; some locations are now allowing the use of cannabis for personal, recreational purposes. With this, the landscape of cannabis attitudes has the potential to change.

Cannabis attitudes and consumption

Cannabis is the single most versatile herbal remedy, and the most useful plant on Earth. No other single plant contains as wide a range of medically active herbal constituents. (Dr Ethan Russo, Chronic Relief, 2012)

In 2016, cannabis remained the world’s most commonly used drug. According to the United Nations Office on Drugs and Crime (2018) in 2016, the number of cannabis users were 192m. Of that figure, 13.8m people were aged between 15 and 16 years old. The UNODC states that the global number of cannabis users continues to rise, increasingly by roughly 16 per cent in the decade ending 2016. Using data from the UNODC the top 30 countries for cannabis consumption are presented in Table I.

Interestingly, many of the countries listed in Table I do not have legalised marijuana laws. However, as highlighted for the countries in Table I, cannabis consumption is common. In the case of this paper, the UK is placed 26th with 6.2 per cent of the population using marijuana
Global attitudes to marijuana are mixed, but greater acceptance towards recreational and medicinal uses and for cultivational purposes are growing. Table II presents a list of countries open to the legalisation and/or use of marijuana for such purposes (the table is not extensive to all countries globally). Table II focuses on countries with more liberal attitudes to cannabis. However, countries such as South Korea, China, Singapore, Malaysia and Saudi Arabia have much harder stances towards cannabis, including significant prison sentences and even the death penalty (Hanna, 2018). Table II does not present a comprehensive overview of the countries in Table I. Instead, the purpose of Table II is to provide the reader with an overview of countries with more liberal attitudes and laws towards cannabis consumption. The focus is on the three main contexts in which cannabis is often considered within law, it is recreational and medical uses and the cultivation of the plant.

### Table I  Top countries for cannabis consumption

<table>
<thead>
<tr>
<th>Country</th>
<th>Consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Iceland</td>
<td>18.3% of the population use marijuana</td>
</tr>
<tr>
<td>2. USA</td>
<td>16.3% of the population use marijuana</td>
</tr>
<tr>
<td>3. Nigeria</td>
<td>14.3% of the population use marijuana</td>
</tr>
<tr>
<td>4. Canada</td>
<td>12.7% of the population use marijuana</td>
</tr>
<tr>
<td>5. Chile</td>
<td>11.83% of the population use marijuana</td>
</tr>
<tr>
<td>6. France</td>
<td>11.11% of the population use marijuana</td>
</tr>
<tr>
<td>7. New Zealand</td>
<td>11% of the population use marijuana</td>
</tr>
<tr>
<td>8. Bermuda</td>
<td>10.9% of the population use marijuana</td>
</tr>
<tr>
<td>9. Australia</td>
<td>10.2% of the population use marijuana</td>
</tr>
<tr>
<td>10. Zambia</td>
<td>9.5% of the population use marijuana</td>
</tr>
<tr>
<td>11. Uruguay</td>
<td>9.3% of the population use marijuana</td>
</tr>
<tr>
<td>12. Italy</td>
<td>9.2% of the population use marijuana</td>
</tr>
<tr>
<td>13. Spain</td>
<td>9.2% of the population use marijuana</td>
</tr>
<tr>
<td>14. Madagascar</td>
<td>9.1% of the population use marijuana</td>
</tr>
<tr>
<td>15. Czech Republic</td>
<td>8.9% of the population use marijuana</td>
</tr>
<tr>
<td>16. Israel</td>
<td>8.88% of the population use marijuana</td>
</tr>
<tr>
<td>17. St Lucia</td>
<td>8.87% of the population use marijuana</td>
</tr>
<tr>
<td>18. Belize</td>
<td>8.45% of the population use marijuana</td>
</tr>
<tr>
<td>19. Barbados</td>
<td>8.3% of the population use marijuana</td>
</tr>
<tr>
<td>20. The Netherlands</td>
<td>8% of the population use marijuana</td>
</tr>
<tr>
<td>21. Greenland</td>
<td>7.6% of the population use marijuana</td>
</tr>
<tr>
<td>22. Jamaica</td>
<td>7.21% of the population use marijuana</td>
</tr>
<tr>
<td>23. Denmark</td>
<td>6.9% of the population use marijuana</td>
</tr>
<tr>
<td>24. Switzerland</td>
<td>6.7% of the population use marijuana</td>
</tr>
<tr>
<td>25. Egypt</td>
<td>6.24% of the population use marijuana</td>
</tr>
<tr>
<td>26. UK</td>
<td>6.2% of the population use marijuana</td>
</tr>
<tr>
<td>27. Ireland</td>
<td>6% of the population use marijuana</td>
</tr>
<tr>
<td>28. Estonia</td>
<td>6% of the population use marijuana</td>
</tr>
<tr>
<td>29. Bahamas</td>
<td>5.54% of the population use marijuana</td>
</tr>
<tr>
<td>30. Sierra Leone</td>
<td>5.42% of the population use marijuana</td>
</tr>
</tbody>
</table>

*Sources: Haines (2017a) and Misulonas (2017)*

(Haines, 2017a; Misulonas, 2017). Global attitudes to marijuana are mixed, but greater acceptance towards recreational and medicinal uses and for cultivational purposes are growing. Table II presents a list of countries open to the legalisation and/or use of marijuana for such purposes (the table is not extensive to all countries globally). Table II focuses on countries with more liberal attitudes to cannabis. However, countries such as South Korea, China, Singapore, Malaysia and Saudi Arabia have much harder stances towards cannabis, including significant prison sentences and even the death penalty (Hanna, 2018). Table II does not present a comprehensive overview of the countries in Table I. Instead, the purpose of Table II is to provide the reader with an overview of countries with more liberal attitudes and laws towards cannabis consumption. The focus is on the three main contexts in which cannabis is often considered within law, it is recreational and medical uses and the cultivation of the plant.

**Cannabis, legalisation and tourism**

There should be availability [of marijuana] under appropriate circumstances. (*Hillary Clinton, Durando, 2014*)

Whilst attitudes are changing in western society, the use of cannabis is often left to the fringes, as it is frequently categorised as a deviant leisure activity, be it as a private activity in the home, or as a leisure experience when travelling to locations where it is legal (Becker, 1953; Goode 1970; Rojek, 2000), or more leniently accepted. Cannabis discussions can often be located within academic tourism literature which explores social behaviour amongst marginalised groups, such as hippies and musicians (Becker, 1963; Merton, 1968; Rojek, 1999), or other non-institutionalized forms of tourism such as the backpacker community and drifters (Cohen, 1973; Riley, 1988; Scheyvens, 2002). As noted by Belhassen et al. (2007) taking a stigmatised approach to cannabis from a tourism perspective...
<table>
<thead>
<tr>
<th>Country/source</th>
<th>Recreational</th>
<th>Medical</th>
<th>Cultivation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Argentina/(Infobae, 2017)</td>
<td>Decriminalised</td>
<td>Legal</td>
<td>Illegal</td>
</tr>
<tr>
<td>Australia/(Copeland, 2010)</td>
<td></td>
<td>Legal at federal level and in all states</td>
<td>Legal for medical purposes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Qualifying conditions and other details vary by state</td>
<td></td>
</tr>
<tr>
<td>Austria/(Seshata, 2015)</td>
<td></td>
<td>Legal for personal use</td>
<td>Allowed for medical purposes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Possession for personal use</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Domestic</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Legal</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Decriminalised for cultivation of one plant</td>
<td></td>
</tr>
<tr>
<td>Canada/(Canada, 2018)</td>
<td>Legal</td>
<td>Legal</td>
<td>Legal</td>
</tr>
<tr>
<td>Chile/(Cannabis, 2018)</td>
<td>Decriminalised</td>
<td>Legal</td>
<td>Legal</td>
</tr>
<tr>
<td>Colombia/(Langlois, 2012)</td>
<td>Legal</td>
<td>Legal</td>
<td>Legal</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Decriminalised up to 22 grams for personal use</td>
<td></td>
</tr>
<tr>
<td>Croatia / (The High Can, 2018)</td>
<td>Decriminalised</td>
<td>Legal</td>
<td>Illegal</td>
</tr>
<tr>
<td>Czech Republic/(Combiz, 2018)</td>
<td>Decriminalised up to 10 grams since 2014</td>
<td>Legal</td>
<td>Legal</td>
</tr>
<tr>
<td>Denmark/(Shekshnya, 2018)</td>
<td>Illegal for recreational use, however, the law is often unenforced by police. (Declared legal in Freetown but this is unrecognised by Danish authorities)</td>
<td>Legal</td>
<td>Legal</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Finland/(Cannabis, 2018b)</td>
<td>Illegal but sometimes not enforced</td>
<td>Legal under license</td>
<td>Legal for medicinal use only</td>
</tr>
<tr>
<td>Georgia/(State Laws, 2018)</td>
<td>Decriminalised for possession and consumption</td>
<td>Use is legal, but no system for the dispensing of cannabis exists</td>
<td>Decriminalised for personal use</td>
</tr>
<tr>
<td>Germany/(DW, 2018)</td>
<td>Possession illegal, but consumption legal</td>
<td>Legal to those with a prescription</td>
<td>Legal if permission is given by “Federal Institute for Drugs and Medical Devices”</td>
</tr>
<tr>
<td>Israel/(Osborne, 2018)</td>
<td>Currently illegal; decriminalisation being considered</td>
<td>Legal</td>
<td>Licensed medicinal providers only</td>
</tr>
<tr>
<td>Italy/(Povoledo, 2018)</td>
<td>Decriminalised; allowed for religious usage</td>
<td>Legal</td>
<td>Illegal</td>
</tr>
<tr>
<td>Jamaica/(Margolin, 2018)</td>
<td>Decriminalised; legal for Rastafarí</td>
<td>Legal</td>
<td>Legal</td>
</tr>
<tr>
<td>Luxembourg/Walder, 2018</td>
<td>Decriminalised</td>
<td>Legal</td>
<td>Legal</td>
</tr>
<tr>
<td>Mexico/Jankian (2018)</td>
<td></td>
<td>Legal for medical use, THC content below 1%</td>
<td>Legal for medical purposes. Decriminalised for personal use</td>
</tr>
<tr>
<td>Netherlands/Hanes, G. (2017b)</td>
<td>Illegal – but use and sale is tolerated in licensed coffeeshops. Possession of up to five grams is decriminalised.</td>
<td>Legal</td>
<td>Legal</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Decriminalised up to five plants; plants are generally still destroyed. Home growers can be evicted for one single plant or have their mortgage cancelled</td>
</tr>
<tr>
<td>Norway/(Cannabis, 2018c)</td>
<td>Illegal (in progress of decriminalisation)</td>
<td>Legal</td>
<td>Illegal</td>
</tr>
<tr>
<td>Peru/(Dunnell, 2018)</td>
<td>Decriminalised</td>
<td>Legal</td>
<td>Illegal</td>
</tr>
<tr>
<td>Poland/(Sharman, 2017)</td>
<td>Illegal, but sometimes not enforced for small amounts</td>
<td>Legal</td>
<td>Legal</td>
</tr>
<tr>
<td>Portugal/(Seshata, 2014)</td>
<td>Decriminalised up to 25g herb or 5g hashish illegal</td>
<td>Legal</td>
<td>Legal</td>
</tr>
<tr>
<td>UK/(Gov, 2018)</td>
<td>Legal in 9 states, the District of Columbia, and some Indian Reservations – but illegal at federal level. An additional 13 states and the USA Virgin Islands have decriminalised</td>
<td>Legal for all uses</td>
<td>Legal</td>
</tr>
<tr>
<td>USA / (NCSL, 2018)</td>
<td>Legal</td>
<td>Legal for up to six plants</td>
<td>Legal</td>
</tr>
<tr>
<td>Uruguay/(Arsenault, 2018)</td>
<td>Legal; buying prohibited for foreigners</td>
<td>Legal</td>
<td>Legal</td>
</tr>
<tr>
<td>Zimbabwe/(Polianskaya, 2018)</td>
<td>Legal</td>
<td>Legal</td>
<td>Legal</td>
</tr>
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The state of Uruguay

The following points are discussed by Arsenault (2018), who offers an insight into the current cannabis for recreational use. Legal marijuana is carefully controlled by a small number of suppliers.

In 2013, the South American country Uruguay became the first nation in modern times to legalise marijuana for recreational use. After Uruguay legalised cannabis, Canada became the first G7 nation to also legalise cannabis for recreational use. Legal marijuana is carefully controlled by a small number of suppliers which supply the market.

However, this issue is looking less significant as other countries, such as Canada and US states, are also considering legalising cannabis. Again, many of the supply approaches discussed here are measures which are considered to be illegal or illegitimate in either the visited destination or the tourist’s country of origin" ( Uriely and Belhassen, 2005, p. 239). Such an outlook to cannabis is appropriate depending on the opinion and attitudes of different communities and nation states. However, the consumption of and the growing consumer market across the west, particularly the Americas, suggests that the attitudes towards cannabis are no longer what they used to be. So much so that studies are focusing less on the deviant nature of cannabis and more towards a process of normalisation (Parker et al., 1998; Peretti-Watel and Lorente, 2004). Previous literature in which cannabis is discussed as a normalised activity is often located within music leisure activities, including nightclubs, raves and festivals (Korf, 2002). The process of normalisation is significant and explored later in this paper. The cannabis tourism landscape is changing, and western attitudes and importantly laws are becoming more liberal. All of this is having a significant impact on social attitudes towards cannabis, its production, consumption and significantly its market value. A recent article by Kovacevich (2018) in Forbes explores cannabis tourism as the next big thing. In the article, Deidra Bagdasarian co-founder of Ganja Goddess Getaway (a wellness retreat designed for women who already love cannabis) as well as creator of “Bliss Edibles” (one of the premier cannabis confectioneries in the USA) says “Cannabis attracts everyone, from lawyers to truckers”. However, from a leisure perspectve, even though the market for consumption is growing, with a diverse range of consumer products and experience available, “because the legalised part of the industry is so new, many states simply have not addressed tourism” [Kovacevich, 2018] in the USA. The Netherlands has often been a popular location for cannabis consumption, and a useful example when discussing cannabis consumption and tourism. Despite the range of coffee shops which sell cannabis, the drug is illegal, but authorities turn a blind eye to those in possession of 5 g or less, whilst venders can store a maximum of 500 g (Haines, 2017b). However, politicians are constantly debating the laws, for example, Hague, a North Sea coast city in Western Netherlands have tightened laws by outlawing the smoking of cannabis in the city centre. Due to resident complaints, 13 designated places including the major shopping areas and central railway stations are to be cannabis smoke free zones (Rizzo, 2018). Kuper (2018) notes that “it’s a misconception that the Dutch state is pro-pot […] Rather, the Dutch state is pragmatic. It prefers to keep risky activities out in the open where they can be regulated (and taxed), whereas other countries push them underground into zones of disorder”.

In 2013, the South American country Uruguay became the first nation in modern times to legalise cannabis for recreational use. Legal marijuana is carefully controlled by a small number of chemists who then distribute high quality affordable products to the market (Cockburn, 2018). The following points are discussed by Arsenault (2018), who offers an insight into the current state of Uruguay’s cannabis market. Since its legalisation, progress has been positive with some logistical challenges remaining (according to Martin Rodriguez, Director of Uruguay’s cannabis regulatory authority). Rodriguez said that the model Uruguay applies is different from other regions, but the objectives are similar. Selected pharmacies are used as dispensaries and no prescription is required for citizens. Citizens can purchase up to 40 g per month (with a price of $2.50 per gram). At present, only two companies have a license to produce commercial cannabis and more than 22,000 Uruguayans have registered as purchasers (in a population of 3.5m). At present, this control of the industry presents some challenges, such as ensuring there is enough cannabis to meet the demand, as harvesting enough to supply the market is causing some difficulty. Alternatively, Uruguayans can register to cannabis clubs to grow their own marijuana. Such cooperatives must have less than 45 members and are limited to no more than 450 g of harvest per member per year. At the time of writing there were said to be 83 cannabis clubs and more than 8,200 registered home growers. Foreigners (or tourists) are not able to purchase cannabis in the country, thus the black market continues to function (Arsenault, 2018). Another current issue is the cash flow related to the cannabis market as some large banks are apprehensive to deal with the industry, fearing running afoul with US financial regulators. However, this issue is looking less significant as other countries, such as Canada and US states legalise cannabis. Again, many of the supply approaches discussed here are measures considered and incorporated into the UK scenario.

After Uruguay legalised cannabis, Canada became the first G7 nation to also legalise cannabis for recreational use. "The Bank of Montreal became the first major bank in Canada to lead an equity..."
financing deal with a legal Cannabis producer” (Arsenault, 2018). With a powerful backing sector and strong ties to the USA, it is likely that financial regulators will take no action against various banks, including those in Uruguay. Uruguay have made significant strides, and whilst challenges exist, their model to cannabis legalisation has been seen favourably. John Walsh (Co-director of drug policy for the Washington Office on Latin America) suggested “if you start strict, it’s easier to loosen up later” (Arsenault, 2018), US president Richard Nixon in 1969 announced “a war on drugs”, with the aim to eradicate drugs and to imprison drug offenders. However, after more than $1 trillion spent on the drug war, attitudes and approaches are also shifting in the USA with various states relaxing and amending their cannabis laws (Cockburn, 2018). At present, 31 States and DC offer legal medical Marijuana and 9 States and DC of legal marijuana for recreational purposes (ProCon, 2018). The USA has seen growth in the cannabis market value. According to data published by Hexa Research, the cannabis market in 2016 was valued at $5.44bn and is expected to reach $19.48bn by 2024. This strong growth during the forecasted period is said to be due to the plant’s multiple medical benefits as well as the fast-paced legalisation currently underway in the USA (Market Watch, 2018). One US state that has seen great benefits for cannabis tourism is Colorado. According to a report from the state’s department of revenue, figures suggest that cannabis tourism has grown 51 per cent since 2014, with 6.5m cannabis tourists visiting in 2016. Estimates suggest the numbers will continue to grow in the coming years (Kovacevich, 2018). Themed approaches are also popular with “wine and weed” tours popular in California. Here party buses allow smoking passengers (sealed off from the driver). There are also “puff and paint” events featuring cannabis tasting sessions, luxury cannabis getaways and much more (Kovacevich, 2018; Taylor, 2015).

In Canada, cannabis possession first became a crime in 1923 but medical use has been legal since 2001. However, since the change in law (in 2018), Canadians can now buy and consume cannabis legally. While some groups (such as Conservative politicians and indigenous groups) opposed the new law, Prime Minister (at the time) Justin Trudeau tweeted that until now, “it’s been too easy for our kids to get marijuana – and for criminals to reap the profits” (BBC News, 2018c). Research by Osborne and Fogel (2016) examined the perspectives of 41 Canadian adults (who were cannabis users) and their attitudes to decriminalisation and legalisation of the drug. Their findings highlighted that most participants strongly favoured the legalisation of cannabis. The reasons identified where prohibition is unjust, economic benefits, reducing violent crime associated with the drug trade, reducing the cost of the criminal justice system, increased safety and reducing the stigma associated with cannabis use (Osborne and Fogel, 2016, p. 12).

The BBC News (2018b) offers some early insights into the Canadian approach to cannabis. The Canadian approach seems to be like that of Uruguay. Canadians will be able to purchase cannabis and cannabis oil which are grown by licensed producers at selected retail locations, as well as from federally licensed online producers. Legally, adults will be able to possess up to 30 g of dried cannabis in public. Additionally, residents will be able to grow up to four plants at home. Local provinces will be allowed to set their own regulations of how it is sold and where it can be smoked. As for marketing, set guidelines for plain packaging with little branding and strict health warnings have been set by the federal government. Furthermore, other restrictions will be put in place, such as the targeting of young people, promotion through sponsorship and using popular celebrities, characters or animals in advertisements to promote cannabis. It is suggested that people caught with more than 30 g and more than four plants (per household) could face up to 14-year prison sentences (BBC News, 2018c). It could be suggested that such a tough stance on breaking the laws allows the Canadian Government to implement a tough approach on the market. Potentially, like Uruguay, start tough and then loosen up and or manage the market and laws as time goes on. The Canadian approach to the “herbal tourist” is not overtly clear at this early stage, as federal legalisation allows provinces to establish their own systems, distributions, tracking, testing, taxation and legal age consumption (McMillan, 2018). As provinces will be writing their own rules, tourists’ ability to smoke cannabis has yet to be determined in any significant detail (Halperin, 2017). However, as reported by Porter (2018), Canada has a history of cannabis users (illegally), with the drug being popular in the country (pre-legalisation). Now, Canada can develop new legal tourism markets, driven by cannabis opportunities. At present it is not evident how individual states will operate from an international tourism perspective, but for the local domestic market new services will begin to emerge. For example, cannabis lounges are become more common. Cannabis food
classes are also available. The focus on cannabis-infused catering is going mainstream to the extent that the national association of food service business, Restaurants Canada, are to host a seminar focused on cannabis cooking. There has also been growth in cannabis tour companies and accommodation themed around “bud-and-breakfasts” (Porter, 2018).

A movement for legalising cannabis in the UK

I think that marijuana should be legalized. I think the only reason it isn’t is because politicians who smoked it when they were young men or young women just don’t have the courage when they become politicians to legalize it. (Richard Branson, Huffington, 2014)

At present cannabis is categorised as a class B drug and possession can incur “penalties of up to three months’ imprisonment and or a fine at magistrates level, on indictment, the penalty is up to five years’ imprisonment and or an unlimited fine” (European Monitoring Centre for Drugs and Drug Addition, 2017, p. 4). In Table I, it was presented that 6.2 per cent of the UK population use marijuana, whilst the European Monitoring Centre for Drugs and Drug Addition (2017) suggests that cannabis remains the most commonly used illicit drug. In young adults (16–34 years old) 11.3 per cent used cannabis (15.5 per cent within the male population and 7.2 per cent within the female population). According to statistics from the Home Office Crime Survey for England and Wales (2018), cannabis was the most commonly used drug in the 2017/2018 with 7.2 per cent of adults aged 16–69 having used it in the last year (around 2.4m people). An article by Cotton (2019a) suggested that “59% of the UK population would support the legalisation of cannabis, with 75% of those asked saying they would be willing to take it if prescribed by a doctor”. At present the law in the UK for recreational and cultivational purposes is illegal. However, Home Secretary Sajid Javid noted that cannabis-based medicines will be available by Autumn 2018. On Thursday 11 October 2018, the UK Government announced that medicinal cannabis would be legal (Gov, 2018). This was driven by high-profile media cases in which young children severely affected by epilepsy were required to travel internationally to seek support for the use of medical cannabis to treat their conditions (BBC News, 2018b). In response to the medical legalisation Sajid Javid offered the following comments: “Having been moved by heartbreaking cases involving sick children, it was important to me that we took swift action to help those who can benefit from medicinal cannabis. We have now delivered on our promise and specialist doctors will have the option to prescribe these products where there is a real need. I’m grateful to the expert panel – who have been considering cases in the interim – and to those who’ve worked hard to bring about this change at the earliest possible opportunity”. From the 1 November 2018 onwards, specialist doctors will be allowed to prescribe patients medical cannabis.

This recent shift in attitude by the UK is contrary to the stance taken around the 1970s when cannabis was outlawed amid fears that it served as a “gateway” to other drugs, often used as a popular debate against the legalisation of marijuana (Busby, 2018). Former Labour Leader Gordon Brown upgraded cannabis from a class C drug to Class B in 2009. During the recent high profile medical cases many people have spoken out regarding the UK’s stance on cannabis. For example, William Hague (Former Leader of the Conservative Party) said that British law is not only “inappropriate, ineffective and utterly out of date”, further suggesting that the UK Government should look to Canada, who have now legalised Cannabis for recreational use in addition to medical use (Cockburn, 2018). At the time of writing, health secretary Jeremy Hunt (Conservative party) admitted the government had not got the law right on cannabis (Cockburn, 2018). Margaret Thatcher’s free-market think tank recently called on the government to legalise cannabis. They stressed that Britain’s black cannabis market is worth £2.6bn annually, with around 255 tonnes sold to more than 3m people in 2017, according to the Institute of Economic Affairs (IEA). Further arguing that the UK could generate £1bn from additional taxes and savings across other public services (Kollewe, 2018). Chris Snowdon (Head of Lifestyle Economic at the IEA) suggested that it was a “high time for reform of cannabis policy in the UK”, referring to the reforms being made by the USA and Canada (Kollewe, 2018).

An article by Kelsey (2018) explores cannabis clubs in the UK, of which there are apparently around 140. Of the 140 it is thought that only around 25 or so are active. People involved meet up in warehouses or empty cafes. The BBC’s Victoria Derbyshire programme took the police and
crime commissioner (PCC) for drug policy to meet people from three of the clubs to explore their opinions on the ongoing legalisation debate. The programme contacted all 39 PCCs in England and Wales (who oversee police forces) to enquire about their respective positions on cannabis clubs and their opinions towards decriminalisation. In total, 33 replied, saying they did not believe criminalisation was necessary with a further six suggesting it was not a focus for them or they were open to discussions on the topic, whilst 16 were actively opposed to decriminalisation (Kelsey, 2018). Keith Beecham (CEO of the Tourism Board for Visit Jersey) recently suggested that the ideal way to boost tourism numbers would be to legalise cannabis for recreational use (raise billions in tax revenue). Whilst acknowledging that Jersey are a long way from any such implementation, with longstanding ethical and legal questions, Beecham, notes, “I would suggest carrying out a consultation and review and see where we end up before we find an appropriate way forward”, further suggesting, “I think it would be short-sighted not to look into it” (Waugh, 2019). The UK Government party, The Liberal Democrats (Lib Dems) champion the legalisation of cannabis. During the 2017, UK general election, the Lib Dems as a party policy pledged to legalise cannabis and allow the drug to be sold on the high street (Hughes, 2017). The party also have a “Let’s Legalise Cannabis” campaign, with the spiel, “Back the Liberal Democrats plan to break the grip of criminal gangs and protect young people by introducing a legal, regulated market for cannabis” (Liberal Democrats, 2018). They also published a report entitled “A framework for a regulated market for cannabis in the UK: recommendations from an expert panel”. The panel members consisted Steve Rolles, Senior Policy Analyst, Transform Drug Policy Foundation (Chair); Mike Barton, Chief Constable, Durham Constabulary; Niamh Eastwood, Executive Director, Release; Tom Lloyd, Chair of the National Cannabis Coalition and former Chief Constable of Cambridgeshire Police; Professor Fiona Measham, Professor of Criminology, Durham University; Professor David Nutt, Founder of Drug Science and former Chair of the Advisory Committee on the Misuse of Drugs; Professor Harry Sumnall, Professor of Substance Use, Centre for Public Health, Liverpool John Moores University (See Rolles et al., n.d.). The report covers many significant issues regarding a potential legalised cannabis market. However, the report does not consider cannabis from a tourism perspective, be it domestically or internationally.

The financial potential for the UK has often been highlighted when discussing the legalisation of cannabis. Managing Director at investment firm Cannacord Genuity and a Leading Cannabis Industry Analyst Neil Marouka recently stressed that the UK was “absolutely missing out on a huge opportunity” to exploit the cannabis market for generating tax revenues, and this leaves Britain falling behind other countries (Chapman, 2018). Other countries across Europe continue to implement legalised approaches. The future size of the European market is not easy to predict with precision according to Stephen Murphy (co-founder of Prohibition Partners, a consultancy firm that gathers intelligence and insights into the continent’s cannabis industry). However, Murphy said, “there is no other industry like it in the world”, with some estimates suggesting that the industry could go from 0 to £49bn in a decade (Chapman, 2018).

Scenario methodology

Storytelling is the most powerful way to put ideas into the world today. (Robert McKee, Story, 2015)

This research takes a scenario planning approach as its methodology. Ramirez et al. (2015, p. 71) suggest that “scenarios are understood to be a small bespoke set of structured conceptual systems of equally plausible future context, often presented as narrative descriptions, manufactured for someone and for a purpose [...].” Ramirez et al. (2015, p. 82) further note that such an approach to research can attract a wider audience, noting, “scenarios have moved on from an object of research by scholars into a research methodology scholars now use to produce ‘interesting research’, manifesting epistemological issues that the broader futures field has grappled with”. In this research, to present a scenario of the future, a narrative has been created. The importance of narrative writing as a method is recognised by Lindgren and Bandhold (2009), who identify the significance in telling a story to the reader. Humans create stories to help them understand life, to create meaning to their lives, to establish order and to ensure we can establish spaces to live collectively and to help us consider where we are now and where we want to be in the future. According to Harari (2015, p. 170), “meaning is created when many people weave together a common network of stories”. We partake in socially accepted behaviours
because others around us do so as well, our families, friends, neighbours and people from other cultures. “People constantly reinforce each other’s beliefs in a self-perpetuating loop. Each round of mutual confirmation tightens the web of meaning further” (Harari, 2015, pp. 170-171). Harari (2015, p. 171) further states that “[...] over decades and centuries the web of meaning unravels and a new web is spun in its place”. Further suggesting that to study history involves watching the “[...] spinning and unravelling of these webs, and to realise that what seems to people in one age the most important thing in life becomes utterly meaningless to their descendants” (Harari, 2015, p. 171). For this research, writing a future narrative aims to present a continuation of current webs (current trends) and how they could unravel into the future, offering a potential insight into what could come next. The topic of this research, the legalisation of cannabis is likely to be deemed provocative for some. But as Yeoman (2012) suggests, whilst narratives should aim for credibility, they are also likely to be challenging. The challenge for scholars researching the future is presenting plausible and valid depictions of the future. Fahey and Randall (1998, p. 9) stress the need that “plausible evidence should indicate that the projected narrative could take place (it is possible), demonstrate how it could take place (it is credible) and illustrate its implications for the organisations (it is relevant)”. Additionally, Lee (2012) acknowledges that authors should aim to integrate knowledge from a variety of disciplines, taking a multi-discipline approach, drawing on data and information from the hard sciences and social sciences to offer predictive scenarios that recognise the complex structures of society. Social scientists who apply a multiple method, mixed methods or serial method to research commonly apply a pragmatic approach to research (pragmatism often viewed as the philosophical partner to mixed methods). A pragmatic approach offers a method to researchers where the plurality of methods and multiple philosophies are embraced (Maxcy, 2003). Tashakkori and Creswell (2007) note that a pragmatic approach provides a “third alternative” for using a mixed method approach, applied by researchers when qualitative and quantitative methods are not considered sufficient to attain research data. In applying a pragmatic approach, the researcher can combine different research philosophies with the aim of finding common ground (e.g. Datta, 1994; Maxcy, 2003; Tashakkori and Teddlie, 1998, 2003). The extrapolation approach to explore current trends is the method used to add plausibility to the narrative. The extrapolation approach provides the researcher with a method where the exploration of past and current trends is considered and unravelled into a future scenario (Thompson, 1979). According to Jungermann (1985), forward inferences are common, as this approach takes a more regular way of thinking about the future, where the researcher sees past and current trends as more parallel throughout time. Thus, this research takes a pragmatic approach by embracing the diverse views of both qualitative and quantitative research, from constructivism to positivism position. Research explores past and current trends via secondary data sources, from academic disciplines (from the social sciences and scientific studies), political debates, numerous industry research-based data and other newsworthy sources. This approach allowed the researcher to explore multiple areas of interest to present a balanced scenario of the future. 

A potential future UK cannabis tourism market

The following presents a written narrative, the story fashioned to establish an idea, a vision in the readers mind of a potential future cannabis industry in the UK. The narrative, as noted in the methodology draws on current knowledge, approaches and trends in the current global cannabis market to justify and add validity to the ideas presented here. Additionally, it presents novel approaches that focus on the potential for a cannabis tourism market in the UK. A market that considers the potential of distributing and selling cannabis throughout the UK, and its consumption by domestic and international tourists. As noted, this market is not suggested to be the dominant tourism market in the UK. What is being proposed is a method of integrating cannabis into the UK with the intention of encouraging greater movement of tourists (domestic and international) around the counties. This scenario is not aiming to explore when in the future this could take place. The focus in this research is on the approach, time is not the central interest, as the approach could be applied at any time in the (near or distant) future. However, using dates can provide a more engaging narrative for the reader and to present a more conclusive picture of the future. So, in the case of this scenario, the author has decided to place the scenario around the year 2035 (providing the narrative with a starting point).
The scenario: cannabis county competitive strategy (CCCS)

The year 2040, we are now entering category stage 2. But let us go back a few years first. In 2035 the UK Government announced the legalisation of cannabis for leisurely use (availability would be from 2037). For the previous two decades, there had been debates surrounding the use of cannabis and early breakthroughs came in 2018 when the government made medical cannabis legal for severe medical cases. This set in motion the gradual movement to legalise cannabis for leisure consumption. Having spent time exploring the approaches to cannabis production and distribution around the globe, the UK Government decided to take a somewhat novel approach. It decided that it would ensure that the legalisation came with a competitive edge, in its CCCS. Figure 1 offers a visual model, providing an illustration for the potential production and distribution of cannabis in the UK:

- The UK Government takes complete control of cannabis production in the UK. At the plantation centres, government produces and regulates 50 different strains of cannabis (in both plant and oil form).
- Cannabis is transported from plantation centres to distribution warehouses. Here appropriate quality control checks are performed. Cannabis products are then appropriately packaged and distributed to vendors (public and private).
- Application of the CCCS: in the UK, there are 48 counties in England, 33 in Scotland, 13 in Wales and 6 in Northern Ireland – 100 in total. Every county in the UK can only sell one strain of cannabis (over a three-year period). Thus, out of the 100 counties, only two at any one time had the same cannabis strain on sale. The CCCS implemented by the government was to trial an approach with the intention to encourage movement within the cannabis leisure and tourism market. Such an approach aimed to increase tourism numbers throughout the UK counties (both domestic and international tourism). Cannabis tourists are required to visit alternative counties in the UK if they are interested in trying the range of cannabis strains. Each county in the UK, as noted, could hold onto their cannabis strain for three years, after which the government would reallocate strains around the UK, thus to ensure competitive diversity.
- Public and private vendors wishing to sell cannabis required a licence and all their cannabis products would have to be purchased via a government cannabis regulator and distributor.
- People wanting to purchase the cannabis would have a Cannabis Users Card (CUC) which would be scanned on every purchase. Uniquely, tourists were also able to attain a Travellers Cannabis Users Cards (TCUC).

Importantly, to manage the introduction of cannabis to local communities, counties had to allocate specific cannabis zones within towns and city centres. Any other forms or personal production and selling would remain illegal. Thus, tougher prison sentences on people producing and supplying cannabis outside the governments’ scheme would be introduced. With better quality cannabis being supplied by government at a better price than the illegal market, users would prefer to purchase through approved government licensed sellers.

There were some key challenges in managing the sale of cannabis and keeping the CCCS functioning without different strains making their way across counties. One such measure was to limit the amount of Cannabis purchased per person. People were allowed to purchase 20 g a month within their own county (clearly stated on their CUC). When purchasing cannabis from other counties UK residents were limited to up to another 10 g (with a maximum purchase of 3 g when in another other county), again, encouraging locals to travel. Whilst for tourists, the numbers were different. Tourists were able to purchase up to 20 g a month (on their TCUC), but no more than 3 g per county in any one month, again, encouraging people to move around the UK. If customers preferred to purchase cannabis oil for recreational use, then equivalent amounts would be available in oil. This helped the government regulate usage and offer support and guidance if deemed necessary.

We are now moving into category stage 2 (the year 2040). So far, the initiative has been a great success across the UK. Whilst not all counties were required to enter the initiative (as countries were allowed to decide if they want to join), the destinations that did buy into the cannabis culture have seen a steady increase in both domestic and international travellers. Significantly, tourism numbers have increased, thus revenue for local cannabis markets is positively increasing.
To further enhance their reputation and desirability various counties have coincided the legalisation of cannabis with various themes, including cannabis movie narratives, medical benefits, 60 s hippie culture, cannabis and art, and innovative ideas based on local county culture and cannabis have also been established. The continued appeal of cannabis social clubs remains (CSC); CSCs existed pre-legalisation (illegally). Others have set up “country cannabis cafe crawls”, whilst locations have further engaged consumers with apps to promote and share their experiences of smoking cannabis across the UK, further promoting, the government’s aim – to promote cross-county tourism driven by cannabis consumption. The initiative is three years young, and there is still a lot to learn. The government has seen large profits in tax revenues, there has been an increase in UK cafe culture, and an increase in local entrepreneurial businesses benefiting from the legalisation. With initial signs being highly positive, other countries are beginning to consider similar approaches to their own cannabis markets.
Sajid Javid on the day of legalising medical cannabis stressed “[…] today’s announcement does not pave the way towards legalising cannabis for recreational use. The penalties for unauthorised supply and possession will remain unchanged” (Gov, 2018). Whilst this suggests that for now, recreational use of cannabis will remain illegal, this should not mean that continued discussions surrounding its future potential should not continue to be debated. The use of hallucinogenic drugs pre-dates our society, with ancient civilisations using cannabis for religions and medicinal purposes (Armiños et al., 2014). However, contemporary attitudes vary significantly, and the current stigmatized attitudes play a significant role in ensuring cannabis remains within the “rebellious” peripheries of society. In more recent times governmental attitudes and laws have often been the driving force behind people’s attitudes towards cannabis and its overall acceptance in society. Since the hippie 60s culture, laws prohibiting cannabis have played a significant role in negatively stigmatising the use of the drug, and such a stigma is difficult to break down, and this is especially the case for the UK. There is a key issue here that needs to be considered. Ideally, there needs to be an approved culture and acceptance of cannabis for a country to integrate legalisation. Take Canada again as an example. As discussed by Porter (2018), the country prior to the legalisation already had an existing culture as Canadians smoked a lot of cannabis. According to statistics by the National Census Bureau, 42.5 per cent of Canadians have tried the drug (Porter, 2018), and this is only the number who owned up to smoking, in all likelihood, the number is significantly higher. There was already high use of the drug and wider social acceptance of cannabis. The owner of the Hotbox Lounge in Toronto’s Kensington Market, who goes by the name of Abi Roach noted that having legalised cannabis, the next stage “[…] is to reform the law to the point that cannabis is going to be a normal part of our lives, whether we choose to consume it or not” (Porter, 2018). Interestingly, others believe that the legalisation of cannabis will not see a dramatic rise in the use of the drug. As noted by Geraint Osborne (sociology professor at the University of Alberta who has studied cannabis use for 13 years), there might be an initial surge in smoking cannabis for novelty reasons, but this will likely decrease over time. Andrew Hathaway (a University of Guelph sociology professor who has also studied cannabis use) pointed out that the government’s regulations which codify a person’s monthly use (30 g) are potentially a method of suppressing and managing the use of cannabis rather than encouraging it (Porter, 2018).

The driving message here, countries considering the legalisation of cannabis must consider the overall cannabis culture present in the country. Canada’s Prime Minister Justin Trudeau who decriminalised cannabis is leader of the Liberal party, thus, holding ideologies of liberalism, a political and moral philosophy that embraces liberty and equality. For a country to accept the legalisation of cannabis, there needs to be acceptance, cannabis needs to be normalised. Normalisation was a term coined by Parker and his colleagues, in studies exploring the use of drugs in adolescents. In later work, Parker (2005, pp. 206-207) offered six indicators of normalisation; first, increasing access and availability; second, increasing prevalence of drug use; third, increasingly tolerant attitudes towards drug use among both users and non-users; fourth, expectations among current abstainers regarding future initiation of drug use; fifth, the “cultural accommodation” of drug cultures in film, TV and music; and sixth, more liberal policy shifts (Parker, 2005, pp. 206-207). These six indicators offer an insight into the normalisation of cannabis in society. From the discussions above, this paper has identified how normalisation or cannabis is taking form, not only globally, but also within the UK. As trends show, our global home is showing more liberal and accepted attitudes towards cannabis. If these trends continue, then there is every potential that the UK might reconsider its stance of recreational use. If this is the case, this paper is asking the question, what about the potential for a cannabis tourism market? Despite resistance to cannabis, attitudes are changing, with Paul North (Director of External Affairs at Volteface, a think tank who come up with alternative drug policies) suggesting, “we are a lot closer than people think to following Canada’s lead”. Mr North projected, “We will certainly see a regulated cannabis market in the UK in the near future” (Chambers, 2018). If a cannabis culture does exist, and cannabis is legalised, then new opportunities will certainly
expose themselves for tourism in the UK. In 2015, Colorado (offering legal cannabis) made $2.6bn off cannabis tourists and this for Cotton (2019a) means the UK could earn significant economic benefits from tourism if cannabis was legalised, whilst CNBS (2019) suggests that in Colorado, “cannabis tourism has given rise to tax revenue for governments, great opportunity for businesses, as well as challenges for travellers and local authorities”:

One of the first things that became apparent about legal recreational cannabis is that it would be a huge attraction for tourists. (CNBS, 2019)

Aligning tourism and cannabis will inevitably have impacts on destinations. Thus, it is necessary for tourism stakeholders, governments (local and national) policy makers, marketeers and cannabis tourism suppliers to work towards a market that is not driven by economic benefits but embodies a mindset that the cannabis tourism industry can provide social-cultural benefits. To develop a cannabis culture that is more widely appreciated, accepted and accommodated, stakeholders would have to consider the types of services and products it would make available to tourists. As this would influence the type of consumers that are likely to participate in cannabis tourism. With continued legalisation in countries like Canada and in US states, overtime, society will amass a greater understanding into the types of consumer experiences that create more positive cannabis tourism cultures. As noted by Cotton (2019b) “If the UK is to legalise recreational cannabis, it must be done carefully and alongside a detailed programme of education. In the UK, we are in an enviable position and can hopefully learn from Canada’s experience and make a fully informed decision after observing Canada’s cannabis market for several years”. It is, therefore, recommended that future research should continue to observe the relationship between cannabis and tourism. Ideally, research should aim to yield evidence-based data that expose the (positive and negative) impacts of cannabis tourism on culture. With this information, stakeholders will be better informed of how to establish cannabis tourism industries that support the social-cultural environments in which they exist; if cannabis is to become legalised.

Conclusion

The aim of this paper was to present a narrative scenario of a future UK tourism cannabis industry. By exploring current global trends and changing attitudes towards cannabis, this paper presented a future scenario in which the UK could potentially establish a cannabis industry that promotes domestic and international tourism across different counties in the UK. Whilst countries like Uruguay, USA and Canada have begun to legalise cannabis for not only medical and cultivation purposes, but also recreational use, the potential for establishing a tourism cannabis market is often overlooked or provided little attention. However, data reveal that globally cannabis consumptions are popular. Thus, if countries are considering allowing the controlled consumption of cannabis for local residents, then why not consider a controlled and managed market for tourism, as the data suggest, demand exists.

As legalisation is still in the early phases in many countries, benefits and consequences are still too early to impartially measure. Acknowledging some significant global shifts in laws and approaches, this paper explored a potential future cannabis market in the UK. The UK witnessed some significant discussions in the legalisation of cannabis recently, driven by high profile cases surrounding children and the use of medical cannabis to support various medical conditions. Consequently, the UK, in 2018 changed its laws, allowing the use of cannabis for “serious medical conditions”. However, it was also noted that the medical legalisation would not lead to recreational legalisation, at least for now. However, the UK has potentially inadvertently set-in motion the potential for greater normalisation of cannabis amongst users and nonusers. In the long term, this could lead to more liberal attitudes towards cannabis amongst the population, especially if wider society begins to recognise that cannabis does have medical benefits. Thus, could more liberal attitudes over time, both globally, and in the UK mean that in the future, the UK could legalise cannabis for recreational purposes?

If more countries continue to legalise cannabis and, consequently, significant benefits (social and financial) are realised, then there is every potential that the UK could follow suit. Significantly, this paper also identified a lack of tourism legislation in destinations that have legalised cannabis for residents, even though demand exists. Thus, this paper offers original ideas in exploring a future cannabis
market in the UK, one where regional tourism is considered. The paper presents an approach that encourages domestic and international tourists to engage with the cannabis industry by navigating a well-managed, local approach to supplying cannabis in the UK. The author offers a clear written narrative to engage the audience. The narrative suggests that the government should take control of the production, distribution and management of the cannabis market, in which the 100 counties of the UK could opt into. It is worth stressing that this paper is not advocating and or supporting the legalisation of cannabis. Instead, this paper is stressing, if the UK did consider legalisation in the future then it should seriously consider the tourism market and the potential for cannabis to draw tourists into and around the UK. Especially seeing that there are large numbers of cannabis users globally, many of whom are in key tourism generating regions for the UK. It could present a range of market opportunities if implemented and managed appropriately. Especially if tourists are further encouraged to travel beyond the traditional UK tourist hotspots, such as London, and to explore regions of the UK that are often deemed less attractive to domestic and international visitors:

When you smoke the herb, it reveals you to yourself. (Bob Marley)

References


California Narcotic Officers (1996), Marijuana is not a Medicine, California Narcotic Officers, Santa Clarita, CA.


Huffington, A. (2014), “Living fully and doing business differently with Richard Branson”, available at: www.huffpost.com/entry/richard-branson_b_5530538?guccounter=1&guce_referrer=aHR0cHM6Ly93d3cuZ29vZ2xlMnNvbi88&guce_referrer_sig=AQAAAZgQTSHoB0gM4tkcuFTVaKqe34JFzK7bG1nFI2ay3LNdRAUjR7z-ZcoFXLSqJ4u5ltjWD1nul5x0xVl2cp6cENhff3LbBm1wOCHjyJB_SbGvG6GJGQH5V4ke5lq3OGz2q_mOQvJhF2V1Dw-rEM4b4tspaZWD1g (accessed 23 May 2019).


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ICT and the future of tourist management

Karen Hughes and Gianna Moscardo

Abstract
Purpose – The purpose of this paper is to speculate how recent and emerging trends in information and communication technology (ICT) could change the way tourism businesses and organizations communicate with and manage their guests.

Design/methodology/approach – This paper applies elements of futures and design thinking to analyze current tourism management practices and identify critical touchpoints that link tourist decisions to management strategies.

Findings – Fictional travel stories were used to identify and analyze how technology might affect tourism through five touchpoints – choice, connection, co-creation, customization and compliance. These stories were analyzed to identify changing forces and suggest potential paradigm shifts that tourism managers need to consider. These included increasingly complex content, the importance of compatible connections, and the critical role of coordination and cooperation in future tourism systems.

Originality/value – While there have been numerous discussions of how tourists and tourism businesses access and use technology, there is little evidence of scholars and practitioners applying formal futures thinking to ICT and tourism. This paper used design thinking and stories to predict and illustrate ways in which technology could be embedded into tourism experiences and services. It suggests that technology can, and probably will, fundamentally change the way in which we manage tourists and their experiences.

Keywords Tourist management, Emerging ICT, Stories, Internet of Things, Futures thinking, Design thinking

Paper type Research paper

Introduction

“We always overestimate the change that will occur in the next two years and underestimate the change that will occur in the next ten. Don’t let yourself be lulled into inaction.” In this commonly cited quote, the Founder of Microsoft, Bill Gates, is urging organizations to be more future-oriented in the way they plan for technology adoption and manage change (Weil, 2008). These sentiments are especially pertinent to tourism, as thinking about and planning for future change has been identified as a major weakness in both tourism research and practice (Yeoman, 2012), particularly in relation to information and communication technology (ICT).

Use of computers and other digital technologies is rapidly evolving. The widespread uptake of mobile devices enables access to multiple sources of information in a ubiquitous, continuously connected environment. The ways in which organizations change and respond to new technology are commonly categorized into three stages (Rainie and Wellman, 2012). In the first or substitution stage, organizations use new technology to automate or do existing tasks more efficiently (Contractor and Bishop, 2000). In the second or enlargement stage people learn to use the new technology to increase both the volume and complexity of existing tasks (Contractor and Bishop, 2000). Through this learning process users begin to recognize new possibilities and new opportunities before moving into the third or reconfiguration phase where the “new technology fundamentally changes the nature of the things it was created to address” (Rainie and Wellman, 2012, p. 297). It is in this third phase that systems experience significant innovation and disruption and organizations face strong competition from those who have adapted more quickly to the changes (Rainie and Wellman, 2012).

The challenge for tourism organizations is to find ways to think ahead to this reconfiguration phase and anticipate the changes that might be required to respond to possible transformations in their markets, processes and systems. The existing literature on ICT and tourism has tended to
focus on the adoption, use, and evaluation of specific technologies, generally arguing for greater use of technology in tourism, usually with a substitution or enlargement claim. While some recent papers have begun to give attention to the potential for ICT developments to produce disruptive and transformative change (Gretzel, Sigala, Xiang and Koo, 2015; Gretzel, Werthner, Koo and Lamfus, 2015; Werthner et al., 2015), to date there appears to be no systematic attempt to analyze tourism futures with regard to ICT. Additionally, scholars have tended to focus on implications for tourism supply with only limited attention paid to tourist decisions. What has not been explored to date is the possibility that advances in ICT are highly likely to change the way tourists contact and interact with suppliers. This paper seeks to address these gaps by combining elements of both futures and design thinking approaches to develop a conceptual framework focused on the touchpoints that link tourists and tourism suppliers, and by using stories to highlight how ICT may transform and disrupt these touchpoints.

Futures thinking, design thinking and stories

Much academic research in tourism looks backwards, providing detailed descriptions of the past and adhering to very traditional communication formats (Sheldon et al., 2011). Futures thinking usually seeks to present ideas about what could happen in the future “to stimulate thinking around key issues” (Varum et al., 2011, p. 100). It has been argued in other areas that if academics want to look forward and study futures and innovation they need to develop not only new methods but also be more innovative in the way they present the resulting knowledge (Gobble, 2014). Analyses of effective futures thinking in both general and tourism contexts consistently conclude that “best practice” approaches are based on mapping and analyzing existing systems; critically examining current assumptions, ideas and practices; and building scenarios or stories of the future (Inayatullah, 2008; Page et al., 2010; Yeoman, 2012).

Design thinking is concerned with presenting ideas about what should happen in the future to guide innovation. Design thinking suggests paying greater attention to analyzing user intentions and evaluations, advocating the use of stories (Brown, 2009) and combining creativity and science for more effective innovation (Goes, 2014). Stories are particularly effective for engaging with and presenting information to key stakeholders (IDEO, 2012). User stories have also been used in futures thinking about ICT in general (cf. Atzori et al., 2014). Given their complementary goals, it is not surprising that descriptions of futures and design thinking offer a similar set of steps and tools for analysis and presentation (Goes, 2014).

Inayatullah’s (2008) Six Pillar model offers five steps for futures thinking that was adapted for this paper. An overview of the futures/design thinking approach used is presented in Figure 1. The first step involved mapping the present by briefly reviewing current approaches to researching tourism and technology adoption. Second, a deeper systems analysis using a story was conducted. This focused on identifying critical touchpoints where tourist goals connect to management actions. Third, the emerging technologies most likely to cause transformation in tourism were described. Fourth, the touchpoints were used to organize a future user story highlighting likely paradigm shifts within tourism management. Finally, the paper presents possible challenges and barriers to change.

Step one: reviewing current tourism ICT research

A review of current research into ICT and tourism was conducted focusing on papers published in the Journal of Information Technology and Tourism between 2010 and 2017, and papers presented at ENTER conferences. These were supplemented by a search through Google Scholar and the major electronic databases of Proquest, Science Direct, Emerald Insight and Sage Journals, which collectively cover all the major journals in tourism including the Journal of Tourism Futures. This second part of the search used the search phrase “ICT tourism review” and variants such “information technology tourism review,” and “technology tourism review” in order to focus attention on a broader level of analysis.

Eight major themes emerged from this review:

1. describing and or advocating the use of different ICT options to do existing tasks better;
2. profiling which tourists use ICT and how tourists use ICT;
3. examining user experience and evaluations of ICT applications in tourism;
4. studying tourist organizations’ adoption and use of ICTs;
5. researching data analytics;
6. discussing technical and design features of, and improvements to, specific technologies;
7. exploring the role of ICT in tourist experience enhancement and co-creation; and
8. analyzing the concept of smart tourism and smart tourism destinations (Law et al., 2014; Liang et al., 2017; Navío-Marco et al., 2018; Standing et al., 2014; Wang et al., 2010; Yuan et al., 2018).

As noted previously, while many ICT and tourism papers suggest ICT has the potential to fundamentally change the nature of tourism and tourism business structures, few have attempted to systematically map out likely changes.

**Step two: using a story to identify critical touchpoints**

The next step in futures analysis is analyzing current systems and processes. It is rare to find information on how tourists interact with and connect to the supply components of a destination (Pearce, 2016). The lack of a widely accepted tourism management system model necessitated use of an alternative approach to analyze management processes and systems. Stories were chosen for two reasons. First this approach is commonly used in both design and futures thinking to link user experiences to management actions (Brown, 2009; IDEO, 2012). Second, tourists’ stories are emerging as an important research and analysis tool because they provide important insights into tourist management issues (Moscardo, 2017a; Woodside, 2010).

The story presented below provides an insight into the key elements of destination experiences as a system and highlights common decisions tourists need to make, types of problems they
have to solve, and touchpoints where they come into contact with supply components. These touchpoints are identified in brackets, and discussed after the story:

The Bennett family has been planning their short break for many weeks. Together they have planned an itinerary that includes three nights in a beachside luxury resort in a tropical location [Choice]. Mr and Mrs Bennett are looking forward to exploring the local art gallery, while Josh and Ella (aged 9 and 11) excitedly discuss the nearby jungle walk to deserted temple ruins and how it sounds just like the setting of one of their favourite Adventure Dan online games.

They check in and click through the online menus on their TV. Mrs Bennett has special dietary requirements and makes a booking at a restaurant where the menu looks like it might accommodate her requirements [Choice]. They adjust the room’s air-conditioning so that it will be nice and cool on their return [Customization], then head out to the nearest art gallery, ignoring the sign asking them to save energy by turning everything off when they leave the room [Compliance].

At the art gallery they explore the art on offer, learning about the local artists from the labels and listening to an audio visual presentation on the role of the environment in inspiring the exhibition. The kids are restless – they have been promised the jungle walk that afternoon if they behave but really, there’s nothing much of interest for them here [Customization]. The kids’ audio trail is boring and the activity centre only has colouring-in sheets and video games [Customization]. Mrs Bennett thinks it would be lovely to meet another family with children of similar ages so the kids could have someone to play with [Connection]. Mr Bennett thinks it might be nice to meet some of the local artists and get more connected to the local community and its culture [Connection].

They return to the hotel for a short siesta in the air-conditioning, then set off on their walk. The kids excitedly push past each other trying to be the first to the ruins. Mrs Bennett has to constantly remind them to stop to read the signs. Together they discuss who might have made the path and how they did it – none of the signs seem to mention this [Customization]. Mrs Bennett gets flustered about making sure the kids stay on the path – it’s quite steep in places but luckily there are fences to stop them getting too close to the edge [Compliance]. Mr Bennett isn’t too pleased though – the barriers spoil his scenic photographs and intrude on his quiet contemplation of nature [Customization].

Once at the temple, the kids climb all over the walls, ignoring the safety signs at the bottom [Compliance]. They’re both really excited to be exploring ancient ruins in the jungle like Adventure Dan. They wonder who built the temple and what it would be like for the explorer who had actually discovered this temple [Customization]. They plead with Mr and Mrs Bennett to buy them paint from the gift shop so they can help colour-in a large frieze of Adventure Dan propped up near the temple walls [Co-creation] but Mrs Bennett isn’t interested and Mr Bennett is too hot and bothered. Perhaps another day…

This user based story highlights the interface or touchpoints where tourists’ problems, activities and decision-making connect with points of supply:

- making choices or decisions about the next course of action such as finding an appropriate restaurant or planning an activity;
- customizing activities, services and experiences to meet personal needs, circumstances and interests;
- complying with safety and minimal impact directives such as staying on paths and not climbing on walls;
- seeking to build connections, either to enhance in-group relationships by ensuring a balance of activities that appeal to all members, or to meet other people such as the local artists or families with children; and
- co-creating experiences that are personally meaningful, engaging and memorable.

Inayatullah (2008) refers to the process of identifying underlying goals and functions as deepening and argues that this process focuses attention on core areas for futures analysis and change strategies. In the Bennetts’ holiday story, the five touchpoints identified (choice, customization, compliance, connections and co-creation) provide a way to think about tourist experiences and management systems that progresses beyond simply describing the elements in the current system.
Step three: describing emerging and predicted ICT development

In 2013, the McKinsey Global Institute identified a set of disruptive technologies predicted to significantly alter the way we think, work and play. Table I provides a summary of technologies most likely to affect tourism. These have considerable scope to influence a broad range of industries, products and services; have the potential to create substantial economic impact; are advancing rapidly; and are likely to change how we view and interact with the world (Manyika et al., 2013).

Many areas of tourism are likely to be impacted and changed by disruptive technologies. Mobile communication devices help travelers to navigate through unfamiliar terrain and to connect with a broad range of tourism providers. They allow tourists to create itineraries “on the run” by providing access to websites, apps and social media sites that offer travel information, booking services and user recommendations. ICTs will allow greater sharing of recommendations from travelers with similar characteristics, motives and preferences. In the future, networks of travelers could be the primary source of hints and advice, with location-based services enabling travelers connect with others in their current surroundings who can provide “real time” advice on things to see and do. As Lamsfus et al. (2015) argue, internet access is virtually ubiquitous which allows people to connect to their social networks and networks of others who may be present in the same time and space. At the moment, social media networks send alerts when someone in your network is in the same vicinity. In the future, we may be able to expand our networks by inviting likeminded others in our immediate vicinity to share our experiences. For example, traveling families could connect to locals with similar aged children to share experiences and resources; or link back to family and friends back home who could simultaneously experience their travels using AR technology.

Digital technologies have already allowed organizations to develop experiences where the virtual world responds to tourists’ actions. To illustrate, the Disney company has developed technology that places weight sensors in cakes so that when a guest takes a slice, butterflies (images projected on the cake) are released (Mine et al., 2012). Augmented Reality can superimpose

<table>
<thead>
<tr>
<th>Table I</th>
<th>Disruptive technologies</th>
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<tbody>
<tr>
<td>Technology</td>
<td>Dimensions</td>
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<tr>
<td>Mobile communication devices (MCDs) (smartphones, tablets, smart watches)</td>
<td>Allow access to online search engines, information, booking services, apps, social media platforms. Change the way in which humans understand and interact with each other and their surroundings (Manyika et al., 2013)</td>
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<tr>
<td>Location-based services</td>
<td>Enable organizations and individuals to track and communicate with people based on their geographical location to provide information and services tailored to a particular point in time and space, and responsive to current conditions and situations (e.g. weather, crowding, bookings, special offers). Core element in pervasive computer games, where the spatial movement of participants in the real world is fundamental to how the game is played and scored online. These networks of players create experiences that evolve from participants’ responses, position and mood (Linaza et al., 2013)</td>
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<tr>
<td>The Internet Of Things</td>
<td>Use of smart sensors in multiple objects in environments that independently collect and share information (Gubbi et al., 2013). Can track and collect information, relay this to networks for analysis, then share and/or act upon that information facilitating effective management and use of resources and spaces (Manyika et al., 2013)</td>
</tr>
<tr>
<td>Augmented reality</td>
<td>Allows the user to see the real world and a super-imposed augmented virtual world simultaneously, creating dynamic environments that “come to life” (Mine et al., 2012). Most current applications focus on visual senses but AR focusing on others senses are likely to become more common (Wang et al., 2013)</td>
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<tr>
<td>Sematic web</td>
<td>Uses algorithms based on previous behavior and preferences to identify and provide individualized content users are likely to want to see (Moreau, 2016)</td>
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images of the past (architecture, furnishings, events) over what is currently visible; headsets and helmets combine computer generated sounds with sounds in the immediate surroundings; and hand-held devices and/or gloves can respond to touch and pressure (Jung et al., 2015).

The key challenge here is that the proliferation of information may hinder rather than enhance tourists’ understanding and decision making. One strategy to help tourists cope with the increasing volume of information and possible choices is the use of semantic tagging and programming to customize information more closely to individual preferences. Many websites already offer additional information and advertisements to tourists based on their patterns of search and use. As sensors embedded in the Internet of Things and data analytic algorithms become more sophisticated and accurate in measuring consumer behaviors, commercial provision of information and advertisements will become more closely aligned to an individual’s needs and preferences. Apps are already able to track tourists’ movements; inform them when they’re in the proximity of favorite brands, events and social contacts; and provide directions and recommendations (Lua et al., 2015). Tagging could also be used to direct people’s movements. Currently, site managers use a combination of physical environmental design (fences, walkways) and persuasive communication (e.g. signs, brochures, guides), sometimes supported by threat of penalty, to guide tourist behavior in areas where safety and negative impacts are a concern (Mason, 2005). In the future, these functions could be allocated to onsite sensors linked to the Internet of Things. These could be programed to send vibrating or audible warning when tourists stray into dangerous or prohibited areas or engage in undesirable actions.

Step four: using stories to understand the forces for change

This step used a futures thinking approach that incorporated the ideas of Raven and Elahi (2015) on the use of stories and narrative in futures analysis. The touchpoints identified earlier (choice, customization, compliance, connections and co-creation) were combined with current and emerging ICT trends to predict how tourism management might look in the future. These predictions were then used to generate a story that illustrates the use of emerging technologies to manage and enhance the Bennett family’s holiday:

At the beginning of the year the Bennett family registered their interest in a June mini-break and three weeks ago got notification that their dream holiday was available! Bookings for hotels, tours and activities that match holidays they have taken previously are on hold if they wished to take up the offer [Customization]. They decide to go! Mr and Mrs Bennett are looking forward to exploring the local art gallery that has been sending them pod casts [Customization], while Josh and Ella (aged 9 and 11) excitedly discuss the nearby jungle walk to deserted temple ruins that feature as the background in their favourite Adventure Dan online games.

On arrival, the robot receptionist accesses their cloud-based guest profiles – no need for tedious forms and procedures – and programs their in-room TV to provide multi-sensory menus from near-by restaurants [Choice]. The automatic Skype connection with each restaurant allows Mrs Bennett to talk to the chef about her dietary requirements and custom-design something suitable for that night [Customization]. As they leave for the art gallery, room sensors turn off the air-conditioning and lights [Compliance].

Sensors in the art gallery retrieve their profiles from their mobile devices and suggest a route through the space that would best suit each of their tastes. As they wander through, each family member receives different information, stories and questions through their Alexa connected headphones [Customization]. Then they all receive a message that a family with similar demographics and taste has entered the gallery – would they like to meet up so the kids can do a treasure hunt together? [Connection] Mr Bennett has concentrated his visit on galleries displaying contemporary artwork and declines because he’s just received a message that his favourite artist is part of a live-stream broadcast in the gallery’s sensory dome and he has lots of questions he wants to ask her [Customization].

The kids and the mums meet up [Connection] and spend the next hour happily looking for the “treasure” in certain art works. They adjust the colours and composition of each painting by holding up their mobile devices, giving it instructions and seeing it change on screen [Customization]. This provides much entertainment, especially as their Snapchat glasses allow them to share their “new” paintings with their social media networks [Connection].
After lunch, the family sets off on their walk with their new friends [Connection]. The kids excitedly push past each other trying to be the first to the ruins. As the families reach points of interest, their mobile devices vibrate to alert them to audio and/or visual information about the place [Customization]. Together they discuss who might have made the path and how they did it – their wearable devices interpret the conversation and almost immediately the answers start to appear. Mr. Bennett doesn’t really want this information so he turns that function off on his device [Choice]. The path is quite steep in places but sensors activate loud warning sounds if anyone gets too close to the edge [Compliance]. Mr Bennett is happy because there are no fences to spoil the view and the feeling of being in nature [Customization].

As they approach the complex, they receive notification that a large tour group is currently onsite; consequently, a secondary path is now open – taking this will ensure that by the time they reach the main temple, the group will have left [Customization]. Suddenly, the path lights up – it’s an Adventure Dan hologram inviting them to don their portable AR headsets to explore the temple with him! Using their AR headsets, they are able to see, hear and smell what the temple would have looked like when it was first discovered 200 years ago. Adventure Dan invites the children to take on the role of their favourite character, and together they act out a story about discovering hidden treasure [Co-Creation]. The kids are particularly intrigued that Adventure Dan knows so much about their tastes and preferences [Customization]. This is so cool and they don’t need an adult to play! Their parents start to relax – each child is tagged through their devices so it’s easy to see where they are on the online interactive site map. They also know that onsite cameras and sensors will prevent the kids climbing the walls or doing anything silly [Compliance].

Just as she’s wondering how to spend the next hour or so, Mrs Bennett is delighted to receive an invitation on her mobile device from the tribal chief to hear the story of the temple’s creation – exactly what she’s interested in [Customization]. She pops on her Snapchat glasses so she can livestream the experience to her best friend at home [Connection]. Mr Bennett wants a more solitary experience. He turns his device to “quiet contemplation” mode and wanders through the site listening to relaxing music [Choice].

That evening, Josh and Ella download a recording of their Adventure Dan experience that features them as the lead characters in their very own story [Co-Creation]. They can’t wait to post this to the Adventure Dan online community for other gamers to enjoy and comment on [Connection]!

The changing forces within tourism management that have been highlighted in this story are summarized in Figure 2. This is a positive scenario in which the predicted technologies enhance
the visitor experience along a number of dimensions. It is possible to generate a number of alternative scenarios ranging from a very negative one in which the predicted technologies detract from all dimensions of the experience through to scenarios in which the technology is sometimes a positive force and sometimes a negative one. It is also possible to extend this analysis to include features beyond the immediate visitor experience in some detail including pre-travel decision making and post-travel reflection. Unfortunately space restrictions in a single paper exclude detailed examination of all these alternatives. The choice to focus on a positive scenarios reflect the strong focus in the existing tourism and ICT literature on highlighting how these predicted technologies will enhance tourism. Negative or critical analyses of ICT and tourism are extremely rare. The choice to focus on the tourist or visitor experience rather than on other travel phases was based on a desire to explore this aspect of tourism in more detail as the existing literature mentions it but generally focuses on tourism organization and processes not directly linked to the tourist experience. Thus the aim was to use the existing literature, which is about enhancement and to add to that literature by examining the tourist experience in more detail.

Figure 2 provides a preliminary conceptual framework for the further analysis of these changing forces on tourist experiences. An examination of the tourism literature found no existing general models, frameworks or theories of tourist management as a system or set of interconnected processes. There are numerous texts on tourism management that have implicit models expressed in the topics covered and the order of that coverage, but they are about tourism more broadly and are typically oriented toward setting out supply side components. In these approaches tourists are markets to be attracted, customers to be served, or potential sources of negative impacts with each of these being seen as separate activities (Pearce, 2016). These tourism management approaches do not provide information on how tourists interact and connect to the supply components of destination (Pearce, 2016), or how they manage themselves. The story supported the development of preliminary model of tourism management that connects tourism businesses to tourists through a set of critical touchpoints that in turn are likely to be changed significantly by emerging and predicted technologies.

The authors now examine these changing forces in more detail, paying particular attention to backstage tourism management changes that would be needed to support the future tourist story. A key feature of emerging technologies is the proliferation and complexity of content available for both tourists and tourism managers. Every aspect of the future story is based upon the generation and use of complex content about the sites, the Bennetts, and other tourists. This suggests a level of knowledge and data collection and manipulation far beyond what is currently considered as user-generated content. Considerable sophistication in the use of data analytic results will be required (Gretzel et al., 2015).

While connectivity is a key theme in discussions of the emerging and predicted technologies, this focus is almost exclusively on the connectivity between devices and between devices and their immediate users. The connections critical touchpoint and the future story alert us to the changing ways in which tourists connect to other people. In future, these types of connections could be more immediate in both time and space and made based on more complex judgments of compatibility between the people being connected (Werthner et al., 2015). While new businesses such as AirBnB and Uber are often cited as disruptions (Gretzel et al., 2015), they are arguably simply a new type of intermediary connecting tourists to providers. The possibility of connection without any intermediaries could be much more disruptive, especially in terms of changing the power relations amongst providers at a destination (Atzori et al., 2014).

One notable absence in the future tourism story is lack of any immediate contact with, or use of services from, a destination marketing organization (DMO). Currently DMOs identify markets, advertise, provide information about destination businesses and assure service quality. These activities are already becoming obsolete (Wang et al., 2013), consequently DMOs are increasingly engaging in alternative functions such as coordinating smart infrastructure, data analytics, and disseminating knowledge to destination stakeholders (Buhalis and Amaranggana, 2014).

The ability of tourists to connect directly to other tourists, destination residents and small specialized tourism businesses supports tailored customization and extensive co-creation of experiences. A future tourism world that offers complex choices, customized experiences,
compatible connections and opportunities for co-creation assumes a high level of cooperation and coordination amongst tourism providers.

Cooperation is not just about creating meaningful tourist experiences. The future tourism story also highlights potential ways in which tourist site and attraction managers might be able to use the new technologies to encourage compliance with safety directions and minimal impact behaviors. The story describes the absence of onsite physical structures such as gates, fences and signs to provide safety and support onsite experiences. Moscardo (2017b) notes that over time there have been changes in interpretive practice and theory toward a strong focus on managing tourist pressure on heritage places. The ability of emerging technologies to take on these tasks will require a significant change in the way interpreters think about their roles. The future story presented here is a hopeful one in which site managers and tourists cooperate in ways that support safety and minimize negative impacts on the site. This vision is based on a level of cooperation between the tourists and the site managers that requires much less direct control from managers. A less hopeful story might have cooperative compliance replaced by more severe management control.

The future tourism story also highlights the extensive automation that could happen in tourism. Such automation could make many current tourism employees redundant, an outcome acknowledged in general discussion of ICT futures (Anderson et al., 2014) but not given much attention in ICT and tourism. While this creates immediate concerns for the endangered tourism employees, it should also create concern at a broader level as in many destinations, residents only tolerate the negative social, cultural and environmental impacts of tourism because of the employment it generates.

The future travel experience described in the Bennett story also assumes the existence, coordination, maintenance and management of the required infrastructure and systems, a common assumption in many ICT futures scenarios (Rose et al., 2015). In these new systems value is created and exchanged in new ways (Gretzel et al., 2015). Emerging business opportunities include the design, creation, installation and maintenance of the infrastructure and systems (Anderson et al., 2014), and services to assist users to navigate complex systems (Atzori et al., 2014).

In addition to the assumption that the required infrastructure and systems to support these new technology-based tourist experiences exist, is the assumption that all tourism providers have the capacity to effectively use these systems. Required capabilities has been discussed in both the general ICT literature as well as the ICT and tourism literature. The most commonly listed required skills are mastering and managing complexity and constant change, IT literacy, knowledge management, network management and continuous learning strategies (Atzori et al., 2014; Maryika et al., 2013).

In the predicted future tourism world, businesses will not sell intangible service elements, but rather offer specific skills, services and capacities to tourists creating their own experiences, or to other providers in dynamic, flexible informal networks (Maryika et al., 2013). Such providers would need to be able to identify what they have that is of value to others in the network. They will also need to be able to engage in and manage multiple relationships within complex networks. This will require considerable sophistication in cooperation, knowledge sharing and coordination skills (Gretzel et al., 2015).

**Step five: identifying constraints, challenges, concerns, cautions**

The rapid emergence and evolution of technical innovations can be seen as a double-edged sword. Some organizations and destinations will embrace new technologies and the potential they offer; others may not be ready for this change and may find it difficult to operate in a system that no longer follows traditional rules and practices (Pedrana, 2014). There are a number of constraints and challenges associated with using ICTs to manage tourists. These include:

- Organizational reluctance to use technology. Purchasing, installing and maintaining equipment, then training staff to effectively use and manage these systems, is expensive and time-consuming (Maryika et al., 2013). Where businesses choose not to adopt new technologies they may create frustration for tourists who want to use new technologies and systems in places where these are not supported.
While computers may make some tasks more efficient, tourism is a people-based industry where the quality of customer service often determines tourist satisfaction. Replacing staff with computers, introducing self-service for tasks such as hotel check-in and meal ordering, and booking every element of tourists’ itinerary prior to arrival may remove the interpersonal and spontaneous elements of travel. Tourists who want the personal touch may go elsewhere. Any introduction of computer-based solutions to management issues needs to consider the importance of functional benefits vs personal/emotional engagement.

Some businesses and organizations may resist sharing information as it limits their control over the content (Proctor, 2010).

The many opportunity for tourists to connect amongst themselves may circumvent the need for formal tourism providers, thus fundamentally changing the key players as well as the nature of relationships in tourism experiences.

Privacy and security issues are a genuine concern, particularly if data are stored permanently. The Internet of Things and supporting Cloud technology raises questions about the use and dissemination of data that have been collected and stored with or without people’s knowledge or permission. Identity protection and possible security and infiltration of the network for criminal or terrorist purposes are also concerns (Gubbi et al., 2013; Manyika et al., 2013). Recent studies of young adults revealed that Gen Y and Gen Z are particularly concerned about war, terrorism and political conflict, and that these concerns are more evident amongst young adults living in developed economies than those living in emerging economies (Coca-Stefaniak and Morrison, 2018). Given that these are the tourists of the future, issues related to personal safety, cyber security and cyber terrorism need to be taken into consideration when designing and implementing ICT solutions to managing tourist destinations and tourists.

The same systems that collect data and monitor behavior could also be seen as surveillance that supports control over that behavior (Anderson et al., 2014); not all tourists will appreciate this.

As technologies continue to evolve and advance, there’s a possibility that people will replace real travel with augmented reality experiences. While this could help mitigate the challenges of managing tourists in fragile, remote and/or over-crowded destinations, it may create new problems in terms of attracting sufficient people to particular places.

Conclusions: to infinity and beyond

The existing discussion of ICT and tourism has mostly focused on ways in which new technologies can automate or make existing tasks more efficient (doing old things better) or ways that expand and alter existing tasks (doing old things in new ways). For many organizations the real challenge lies in trying to think ahead to what happens beyond these options, what new things are going to emerge and what fundamental changes might ensue (Contractor and Bishop, 2000; Rainie and Wellman, 2012). Futures and design thinking are both areas that offer methods for systematically examining this third stage with the aim of stimulating thinking about what could or should happen in the future. The ability to generate potential future scenarios or stories is critical for developing proactive strategies to engage with these options (Yeoman, 2012).

Although papers in ICT and tourism often talk about the possibility of declines in areas and the emergence of new businesses, few have offered specific details. The present paper expands upon this discussion by highlighting the potential for the loss of many of the current jobs in tourism in a number of areas and the need for DMOs to carefully consider their role in tourism. Studies are needed to explore how technology-driven experiences and services influence tourists’ perceptions and satisfaction – can technology really be used in roles that have for many generations been delivered by humans? If the answer is affirmative, studies to identify which sectors of the industry are particularly well-suited for ICT solutions will be required. The paper also identifies a number of areas for new business and employment opportunities. The challenge now is to take these possible paradigm shifts and seek practitioner responses.
Although the focus of the paper was on tourism management practice, the potential paradigm shifts identified also generate issues for tourism educators. Tourism educators need to revisit key features of curricula to ensure that they actually do build skills in knowledge management, systems thinking, cooperation and coordination, and lifelong learning. These are all areas that will be vital for tourism management in the future but have been noted as deficient in current tourism education approaches (Sheldon et al., 2011). Imagine the Bennetts in the future – maybe tourism management will have nothing to do with marketing destinations and experiences, or managing visitor behavior in-situ:

Slogging through the snow to her front door, Mrs Bennett gets notification on her mobile phone that next weekend the local travel complex will be featuring her first preference, The Great Barrier Reef. Delighted, she confirms the booking. That Saturday, the family check into the complex and change into their summer clothes. It’s hot and slightly humid in their personal AR theatre – just what they ordered! Mr Bennett pulls an icy cold beer from the in-house fridge, and settles into the lounge chair to watch the “waves” breaking on the shore and read his online newspaper. The kids plunge into the waves, delighting at the cool refreshing water that they feel on their AR wetsuits. They ask if they can swim to the furthest life buoy – Mrs Bennett nods happily as she lies back onto her towel. She knows that they won’t actually physically move from the room and that by the time they have tired themselves out, she’ll have a lovely all-over tan as a reminder of the relaxing day.

But maybe the Bennetts don’t even need to travel to the complex – AR travel rooms may become a feature of homes in the future. These rooms could show AR places of the Bennett’s choice; alternatively, they could show livestream footage from people in their social networks who are currently traveling. With a flick of a switch, the room could convey the temperature, smells and sounds of “their” traveler’s physical environment. The Bennetts can see exactly what their friend sees and can talk to them during the experience, all from the comfort of their own home.

References


Yeoman, I. (2012), 2050-Tomorrow’s Tourism, Channel View, Bristol.

About the authors

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Requirements for future digital visitor flow management

Marcel Huettermann, Tatjana Thimm, Frank Hannich and Christine Bild

Abstract

Purpose – The purpose of this paper is to examine visitor management in the German-Swiss border area of the Lake Constance region. Taking a customer perspective, it determines the requirements for an application with the ability to optimize personal mobility.

Design/methodology/approach – A quantitative study and a survey of focus groups were conducted to identify movement patterns of different types of visitors and their requirements concerning the development of a visitor management application.

Findings – Visitors want an application that provides real-time forecasts of issues such as traffic, parking and queues and, at the same time, enables them to create a personal activity schedule based on this information.

Research limitations/implications – Not every subsample reached a sufficient number of cases to yield representative results.

Practical implications – The results may lead to an optimization and management separation of mobility flows in the research area and be helpful to municipal planners, destination marketing organizations and visitors.

Originality/value – The German border cities of Konstanz, Radolfzell and Singen in the Lake Constance region need improved visitor management, mainly because of a high level of shopping tourism by Swiss visitors to Germany. In the Summer months, Lake Constance is also a popular destination for leisure tourists, which causes overtourism. For the first time, the results of this research presented here offer possible solutions, in particular by showing how a mobile application for visitors could defuse the situation.

Keywords Mobile application, Overtourism, Visitor flow management

1. Introduction

Thailand’s popular Maya Bay had to close down in 2018 due to the production of too much waste. In the Philippines, Boracay was closed to tourists for a six-month period to enable the island to recover and fix its sewage problem, while in Ibiza, more than 500 protestors took to the streets recently to show their discontent with the effects of overtourism (Walker, 2018). In 2015, the Äscher–Wildkirchli guesthouse in the Swiss mountains graced the cover of National Geographic and, as a result, it became a world-famous tourist destination. Two years later, due to overwhelming demand, it became very difficult to stay there (Büchel and Waser, 2018). Examples such as these show that overtourism is a worldwide problem and a highly topical phenomenon. In fact, the Oxford Dictionary chose “overtourism” as one of its words of the year in 2018 (Dickinson, 2018).

Richardson (2017) defined overtourism as relating to any destination suffering because of tourism. According to Borg et al. (1996), the term also refers to capacity, meaning the threshold in terms of tourism in any given location. Some measures have been developed to counteract overtourism, such as the management of tourist flows. In April 2018, for example, Venice installed temporary turnstiles to separate the visitors from local residents.

The research area is the Lake Constance region. Its unique location with the three neighboring countries of Germany, Austria and Switzerland all bordering one lake has made the region extremely popular with both international and domestic visitors. In addition to leisure tourism,
exchange rate differences (and the ability to recover sales tax differences) have caused year-round shopping tourism to develop in the region. Due to the favorable exchange rate, many Swiss will cross the border to do their weekly shopping in the border cities of Konstanz, Singen or Radolfzell. Their location on the shores of Lake Constance has an effect on traffic infrastructure, which leads to congestion, especially in the high season in Summer, when the different streams of visitors coincide. Especially in Konstanz, overnight tourism is already being displaced by shopping tourism and there is increasing discontent among the population—a situation that definitely fits the definition of overtourism.

A study involving the collection, analysis and forecasting of data concerning the different visitor streams in the Lake Constance region, with the particular consideration of cross-border flow, can and should serve as a basis for measures to reduce the strain on the region’s infrastructure and is, therefore, of great regional relevance.

To reach its goals, this paper benefits from the emergence of new information and communication technologies, advancing digitalization and the expansion of Wi-Fi infrastructure.

According to the “new mobilities paradigm” proposed by Sheller and Urry (2006), the new information and communication technologies are changing the mobility behavior; on the other hand, they offer new opportunities to direct, guide and manage people, events and activities.

2. Literature review

2.1 Tourist mobility behavior, cross-border tourism

The analysis of visitor flow belongs to the field of mobility research, which is of great importance not only in tourism research (Shoval and Isaacson, 2007) but also in other areas such as transportation, urban or regional planning and the design and marketing of tourist attractions (Lew and McKercher, 2006; Shoval and Isaacson, 2007).

In addition, the spatial mobility behavior of tourists can be used as an important tool of market segmentation. “Spatial tourism behaviour has been in the research agenda since last century and some researchers have pointed out its importance in market segmentation [...]” (Baggio and Scaglione, 2018, p. 2).

In order to better understand the complex and multifaceted concept of mobility, the concept is often subdivided into different categories (Bauder and Freytag, 2015; Groß and Menzel, 2016; Groß, 2017). Groß (2017) distinguished between informational, social and spatial mobility. Bauder and Freytag (Bauder and Freytag, 2015; Weber and Bauder, 2013) also divided the term into three categories, although they refer to the first category not as informational, but as virtual mobility. Groß and Menzel (2016) cited further approaches according to which mobility is subdivided into five categories. This includes the “new mobilities paradigm” with mobility aspects such as “physical travel,” “physical movement,” “imaginative travel,” “virtual travel” and “communicative travel” (Groß and Menzel, 2016).

Spatial mobility is defined as a change in location in physical space, meaning changing location from A to B (Groß, 2017; Weber and Bauder, 2013). Groß (2017) further divided spatial mobility into traffic mobility, lifestyle mobility and migration mobility.

The visitor flow analyzed in this paper belongs to the field of traffic mobility. Traffic mobility can be described as circular or horizontal mobility which first involves a change of location from A to B, but which, after the activities to be undertaken at B such as shopping, work or school, vacation and leisure are finished, is followed by a return back to A. Mobility is further subdivided into everyday and extraordinary mobility (Groß, 2017).

According to infas and DLR (2010), mobility is a complex structure of relationships, the essential characteristics of which, however, can be represented as characteristic values. Stock and Bernecker (2014) identified these values as purpose, distance/space, means of transportation, time and frequency. Further, the term mobility can be interpreted as an individual’s preference for one particular path over another to go from A to B (Weber and Bauder, 2013).
When investigating everyday and extraordinary mobility, it should be noted that “the traditional spatial segregation of locals and tourists has thus increasingly blurred” (Kagermeier and Gronau, 2017). As Kagermeier and Gronau (2017) noted in commenting on Maitland (2008), participating in the ordinary life of a city and its inhabitants can be an important element of the tourist experience. Visitors welcome authentic experiences off the beaten track.

The boundaries between local residents and visitors, or between everyday life and tourist life, are becoming increasingly blurred. The reasons for this are “postmodern patterns of multi-local living,” and the segments visiting friends and relatives and meetings, incentive, conferences and events (Kagermeier and Gronau, 2017).

It should also be noted that shopping as an activity has changed in significance. “Doing the shopping” to buy provisions has turned into “going shopping” as a pastime, a hobby that expresses a certain way of life or lifestyle (Gerhard, 1998). This change in perception (i.e. the increased recreational character of shopping), which is also reflected by the term “experience shopping,” blurs the boundaries between everyday life and leisure time.

Likewise, the boundaries between everyday shopping and leisure shopping are difficult to draw because the question to what extent a purchase is perceived as a necessity of everyday life or as a leisure activity is subjective (Kagermeier, 2008). Fastenmeier et al. (2001) demonstrated that men and women have different perceptions of the recreational value of shopping. There are also differences depending on the type of purchase (shopping at the hardware store vs clothes shopping, for example). A clear and unambiguous distinction between shopping to buy provisions and shopping as an experience is therefore fraught with difficulties (Gerhard, 1998).

Cross-border shopping tourism plays an important role in the border region of Lake Constance. Leal et al. (2010) described the phenomenon of cross-border shopping as follows:

> The differences in the taxation of the same good or service between neighboring countries, neighboring regions, or municipalities in the same country encourage consumers to travel to the jurisdiction where taxation is lower to acquire that good or service, as long as the tax saving compensates for the costs of traveling from jurisdiction to another. (p. 136)

According to Widmann (2008), this form of tourism, meaning visits at regular intervals from across the border to benefit from better prices, cannot really be called shopping tourism. However, if this form of tourism is leisure-oriented and if it occurs less regularly than would be necessary to buy provisions, it can be called shopping tourism (Widmann, 2008). The concept of shopping tourism given by Spierings and van der Valde (2013) falls in line with Widmann (2008) and is elaborating his idea: “recreational shopping,” purposeful shopping” and “daily shopping” all form part of their definition of shopping tourism and therefore this paper follows this broad definition.

According to Leal et al. (2010), the phenomenon of cross-border shopping is not new. In fact, it has been discussed in the scientific literature since at least the 1930s. Widmann (2008) found that border traffic to Germany for shopping purposes takes place both with and without the experience component. Widmann mentioned two cases: regular trips by Danes to Germany to buy food as an example of shopping without the experience component and occasional visits by Poles to Germany to buy clothing and leather goods as an example of shopping with the experience component. Further studies dealing with cross-border shopping in Germany include Makkonen (2016) (the economic impact of cross-border shopping by Danes in Germany) and Sommer (2010) (shopping tourism by Swedes in Germany). Both studies show that according to the authors shopping tourism is not sufficiently included in destination marketing, respectively, tailored to the needs of the respective shopping tourists.

### 2.2 Methods in mobility research

There is a variety of quantitative and qualitative methods for recording mobility behavior (Groß and Menzel, 2016).

An article by Weber and Bauder (2013) gives an overview of the most common methods used in the geographic research of tourism to record mobility and discusses them critically. Groß and Menzel (2016) created another methodological overview with in-depth explanations of GPS methods.
tracking and its different variants and possible combinations with other methods. An overview of traditional and modern methods with their respective advantages and disadvantages was provided by Shoval and Isaacson (2007). Thimm and Seepold (2016) also gave an overview of the methods for capturing mobility and their application in various studies. The authors found out that tourists refused being tracked by a mobile application, because they considered this procedure as too invasive.

According to Baggio and Scaglione (2018), a lack of suitable data, due to traditional and less meaningful methods (e.g. surveys), referred to by Baggio and Scaglione as the “small data approach” constituted a major hurdle in presenting movement patterns in the twentieth century. Nowadays, due to new technology and strategies (GPS tracking, geo-tagged photos, hotel registration information, etc.), more accurate and reliable Big Data approaches have become available (Baggio and Scaglione, 2018).

In general, capturing the spatio-temporal behavior (mobility patterns) of individuals is extremely complex (Shoval and Isaacson, 2007; Weber and Bauder, 2013), which is why a combination of individual methods is recommended for recording them (Weber and Bauder, 2013). Weber and Bauder (2013) argued in favor of the use of a method mix of GPS tracking, a survey with questionnaires and text analysis. Another example of a mixed method can be found in Thimm and Seepold (2016), who used GPS loggers, smartphones and questionnaires to record tourist movement patterns in the Lake Constance region.

2.3 Aspects of IT-based visitor flow management

Valuable behavioral aspects can be derived from IT-based visitor flow management. A classification of general movement patterns can be generated from a comparison of different movement patterns of users in connection with metadata (e.g. weather or personal information). This allows companies to create personas to better understand their customers (Baker et al., 2014; Fong et al., 2015) and to offer personalized products and services (Cameron et al., 2012; Barat et al., 2013; Fang et al., 2012; Muk, 2012). Accuracy in the evaluation and prediction of movement patterns can be increased by including automatically aggregated and evaluated information, as well as user input and context (e.g. “relaxation tourist” or “shopping tourist”). Of course, whether or not accuracy can be enhanced depends on the trust of customers and their willingness to disclose data and information about themselves (Zimmer et al., 2012).

Several different approaches that are relevant in the context of the present research project have been published. Yang et al. (2009) analyzed taxi rides and were able to show that movement patterns and the resulting “critical spots” are time-dependent and may change fundamentally throughout the day. They made no predictions or even recommendations about future developments, however, Ong et al. (2010) discussed an automated classification of users based on their movement patterns, using information about users’ routes (speed and length of stops). The data were linked to semantic information (age, gender and group size) to classify future users semantically, based on their behavior (Hsiao-Ping et al., 2011; Wenjun Zhou et al., 2010). Millonig and Schechtner (2007) introduced a navigation system for pedestrians. This system uses visual markers to simplify orientation for users. Based on context information (e.g. pedestrian traffic), the user can calculate the most suitable route. Sousa et al. (2011) suggested a “comfortability factor” based on user input.

None of the sources listed above considers the interaction or influence of different groups on each other. Although there are approaches to classify individual groups based on their behavior, these are not correlated with each other.

Data provided by a customer can enable a targeted, personalized and location-dependent customer approach (Acquisti et al., 2015; John et al., 2011; Malheiros et al., 2013). This does, however, require the customer’s consent (opt-in). Approaches to promoting these opt-ins using behavioral science (e.g. nudging) are promising. Since the communication medium for influencing behavior in the case of these investigations is an application, the question arises as to how the installation and long-term use of the application can be achieved and what incentivization to install and use the application is most suitable and effective.
Behavioral economics and specifically marketing (behavioral marketing), use gamification and nudging (Choe et al., 2013; Goldstein et al., 2008) to influence customer behavior. Findings about these approaches are mainly limited to offline environments (e.g. road traffic or insurance contracts (Thaler and Sunstein, 2009)). The transfer to an application remains largely unexplored. In the field of e-health and the use of applications over a longer period, it has been shown that fatigue effects set in after only a few weeks (Ba and Wang, 2013; Cafazzo et al., 2012). Approaches that use gamification show some promise in caring for the chronically ill (e.g. diabetes and heart disease sufferers) but are still largely unexplored in terms of using a predictive tool (Cafazzo et al., 2012).

A review of regional specificities has shown that the heterogeneous catchment area of the region should be taken into account with regard to the use of applications and the mobile internet (Gerpott and Thomas, 2014). An important issue that needs to be addressed is the fact that people crossing the border from Switzerland into one of the two EU countries of the Lake Constance region still pay pricey roaming charges. As a result, tourists only use apps in places where they can benefit from free Wi-Fi.

Based on the availability of data, new shopping models (including home delivery, post in-shop purchase) are also conceivable to enable more visitors to use public transportation. Incentives in the form of discounts, dynamic pricing or faster service could encourage carpooling.

The implementation of such concepts requires research, however, which must take into account both the technological perspective (data availability) and the customer perspective (acceptance and customer benefit). The research and implementation of intelligent control systems is ongoing. The goal is the efficient use of infrastructural events by managing traffic flow. These approaches, however, either refer to the current situation, which means that people act based on current tourist flow or that they rely on predictions, which, however, only refer to homogeneous groups sharing the same goal.

Building on this literature review, the following research questions were identified:

**RQ1.** What movement and activity patterns can be identified for local residents and tourists in the border cities of Konstanz, Radolfzell and Singen?

**RQ2.** What requirements does each user group have with regard to a mobile application that optimizes individual mobility?

### 3. Methodology and methods

The current literature review shows that there are a variety of approaches and methods for capturing visitor streams. It is, however, the new approaches and methods (GPS tracking and big data) which are most promising in terms of analysis and prediction. Yet, even these new approaches and methods are not without problems. One fundamental problem is how to procure the data required for effective forecasting tools. Users of apps or similar tools must be convinced of the benefits of the application before they agree to disclose personal data. This is why the authors decided to use a mixed-method approach with the following stages to minimize the data problem (Table I).

In a first step, an online survey was conducted using an online questionnaire to investigate travel behavior in detail and determine requirements for the application to be developed. Next, a typology through face-to-face interviews was developed to gain a better understanding of the

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Based on the availability of data, new shopping models (including home delivery, post in-shop purchase) are also conceivable to enable more visitors to use public transportation. Incentives in the form of discounts, dynamic pricing or faster service could encourage carpooling.
local residents and the tourists to the region. This typology was to be used to make statements about the extent to which the types differ in their mobility behavior. Third, focus groups were conducted to clarify the for an application:

1. How do you usually plan a trip?
2. Are applications used in planning your visit and if so, which ones?
3. What benefits and drawbacks do you see in a potential application?
4. What are your concerns about the potential application?
5. What features and incentives do you expect from such an application?

3.1 Online survey

The behavioral study of the tourists involved recording the needs and requirements of different user groups with regard to the application to be developed. The focus was on Swiss shopping and leisure tourists, who make up a significant proportion of shopping and leisure tourists in the Lake Constance region. Another reason why this group is relevant is that Swiss cellphone users usually pay high roaming charges in the EU countries in the Lake Constance region, which will affect how well a new tourist application will be received.

In order to reach the largest possible number of possible subjects, an online survey was conducted in the largest Swiss daily newspaper, 20 Minuten. A total of 2,661 people participated via a link which was available on the newspaper’s homepage from May 6–13, 2017.

The survey included questions on the respondents’ shopping and leisure behavior, data disclosure, a possible new application and socio-demographic information. From a methodological point of view, this form of survey was chosen for several reasons. Online surveys provide an excellent opportunity to conduct large-scale trials (Couper, 2000; Sheehan and Hoy, 1999; Weible and Wallace, 1998) and are cost-effective (Watt, 1999). In the last 10–15 years, internet usage and computer-aided communication has increased considerably (Fox et al., 2001; Horrigan, 2001; Nie and Erbring, 2000). Advantages of online surveys include low cost; short reaction time; ability of researcher to manage the sample; data can be loaded directly into the data analysis software, saving time and resources associated with the data entry process (Ilieva et al., 2002).

3.2 Face-to-face interviews

The analysis and classification of visitor flow involves studying the mobility behavior of visitors (day visitors as well as tourists) and local residents. The paper therefore focuses on both everyday and extraordinary mobility.

Empirical data collection was carried out by means of face-to-face interviews using standardized questionnaires in combination with GPS loggers. While the GPS loggers recorded the routes taken by the respondents and provided information about route preferences, the questionnaires were used to record mobility indicators.

A pretest took place in the Winter of 2017/2018. This consisted of ordinary interviews (sample size: \( n = 274 \), 48 percent participation) and short interviews in combination with GPS loggers (sample size: \( n = 8 \), return in percent: 17.02).

Concerning the main survey, there was no difference between the ordinary interviews and the short interviews. Due to a lack of willingness in some cases to use the GPS logger, however, an analysis of route preferences proved impossible. The empirical data collection for the main survey took place on various dates in the Spring of 2018 in the cities of Konstanz, Singen, Radolfzell (Germany) and Kreuzlingen ( Switzerland). The remarks and assessments which follow refer to the main survey in the three German cities.

A total of 2,119 people were contacted. In total, 742 participated in the face-to-face interviews (35 percent participation). Due to inconsistencies in answers, broken off interviews and item nonresponse concerning questions relevant to typing (origin, place of overnight stay and activities on the day of the survey), a total of 78 questionnaires had to be discarded. The number of questionnaires that were finally evaluated was 664.
A typology was created by *a priori* segmentation as a method to classify the respondents according to Dolnicar (2002). The typology developed in this paper is based on two criteria, “type of stay” and “type of activity,” with “type of stay” consisting of two components, namely “place of residence” and “place of overnight stay.” This typology, in the following referred to as “type of stay/activity” typology, was used to provide information about potential application users. In addition, it was also used to determine to what extent the different types of people differ in their mobility behavior. Since, as has been noted earlier, sufficient data could not be collected on route preferences, the analysis is based on mobility indicators only. Typology-specific naming of the individual types (Bailey, 1994) is omitted in this paper because of the complexity of the typology.

### 3.3 Focus groups

In total, 24 people, all of whom travel regularly, were invited to participate and were divided into four groups of six persons. The participants were between 20 and 67 years old. In total, 12 of them were male, 12 female. The survey took place in August 2018.

### 4. Results

#### 4.1 Online survey

A total of 2,661 people took part in the survey. The sample includes people of all ages and income levels. Men are over-represented in terms of gender distribution. The majority of respondents (80.8 percent) are Swiss, 11.2 percent are Germans living in Switzerland and 1.5 percent are Italians living in Switzerland. The others are from other countries or did not provide any information on their country of origin (Table II).

With regard to shopping and leisure time behavior, it was found that 73.7 percent of respondents sometimes or frequently combine shopping and leisure activities in the border region. In general, however, the shopping and leisure activity frequencies vary. While people living in Switzerland generally shop in their own country several times a week, 26 percent of them shop abroad only about once a month. Significantly fewer, but still more than four out of ten people, go abroad once a year for recreational purposes. The frequency of cross-border trips for shopping and leisure underlines the importance of dealing with visitor flow in border regions (Table III).

A closer look at shopping behavior shows that cross-border shopping is especially common on Mondays (17.1 percent) and in the evenings between 6 and 10 p.m. (27.6 percent). For many respondents (21.9 percent), on the other hand, the timing was not so important. To shop across the border, people usually travel by car, accompanied by a family member. The car rather than

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<td><strong>Gender</strong></td>
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*Note: n = 2,661*

*Source: The authors’ illustration, online survey 2017*
public transportation (train or bus) is by far the most popular means of transport. This is mainly due to factors such as “easier to travel,” “easier to transport purchases” and “saving time.” The main driver of cross-border shopping is price. What was also mentioned frequently is the ability to find products that are not available at home. Other reasons include easy parking, good sales advice and the need to collect internet orders (many online stores do not ship to Switzerland).

A K-means cluster analysis, an investigation method for grouping objects according to measured or perceived intrinsic features or similarity (Jain, 2010), identified three clusters for different types of purchases ($p < 0.001$):

- Type 1: it chooses to travel abroad for price reasons only.
- Type 2: it has a high price affinity, likes to link shopping abroad with collecting internet orders.
- Type 3: it has a high price affinity, also appreciates the parking facilities, the sales advice, the combination of leisure and shopping and the smooth flow of traffic.

Looking more closely at recreational activities, it becomes clear that most people avoid the end of the week to cross the border. A mere 6.6 percent stated that they engage in recreational activities abroad on a Saturday, while between 15 and 16.4 percent prefer doing so between Monday and Thursday. The time for leisure activities (such as wellness, eating out, or attending concerts and other public events) appears to be morning (between 9 and 12 o’clock, 23.1 percent) and evening (between 6 and 10 o’clock, 26 percent, Table IV).

When searching for information, the respondents usually rely on their own experience or the opinions of friends and/or acquaintances. Also popular are internet search engines. Brochures, books (electronic and print editions), tourist information centers, automobile clubs, travel agencies and the print media (magazines and newspapers) are much less relevant in finding information.

### Table III Shopping and leisure activity frequency

<table>
<thead>
<tr>
<th>Shopping frequency</th>
<th>Leisure activity frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Switzerland (%)</td>
</tr>
<tr>
<td>Once a week</td>
<td>19.6</td>
</tr>
<tr>
<td>More than once a week</td>
<td>59.5</td>
</tr>
<tr>
<td>Once a month</td>
<td>4.6</td>
</tr>
<tr>
<td>More than once a month</td>
<td>8.8</td>
</tr>
<tr>
<td>Once a year</td>
<td>0.9</td>
</tr>
<tr>
<td>Several times a year</td>
<td>6.6</td>
</tr>
</tbody>
</table>

Source: The authors’ illustration, online survey 2017

### Table IV Preferred days for activities

<table>
<thead>
<tr>
<th>Preferred day of recreational activities</th>
<th>Preferred time of recreational activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday</td>
<td>16.4%</td>
</tr>
<tr>
<td>9–12 o’clock</td>
<td>23.1%</td>
</tr>
<tr>
<td>Tuesday</td>
<td>16.3%</td>
</tr>
<tr>
<td>12–15 o’clock</td>
<td>15.0%</td>
</tr>
<tr>
<td>Wednesday</td>
<td>15.2%</td>
</tr>
<tr>
<td>15–18 o’clock</td>
<td>16.9%</td>
</tr>
<tr>
<td>Thursday</td>
<td>15.0%</td>
</tr>
<tr>
<td>18–22 o’clock</td>
<td>26.0%</td>
</tr>
<tr>
<td>Friday</td>
<td>11.2%</td>
</tr>
<tr>
<td>The time does not matter</td>
<td>19.0%</td>
</tr>
<tr>
<td>Saturday</td>
<td>6.6%</td>
</tr>
<tr>
<td>100.0%</td>
<td></td>
</tr>
<tr>
<td>Sunday (open for sale)</td>
<td>8.9%</td>
</tr>
<tr>
<td>the day of the week doesn’t matter</td>
<td>10.5%</td>
</tr>
<tr>
<td>100%</td>
<td></td>
</tr>
</tbody>
</table>

Notes: Preferred day of recreational activities: $n = 3,479$; preferred time of recreational activities: $n = 1,329$. Multiple answers allowed unless someone checked that day or time does not matter.
The majority of consumers spend between CHF200 and 399 (47.8 percent) per day on shopping and leisure activities (according to the Swiss Federal Customs Administration, goods up to a total value of CHF300 may be imported VAT (sales tax)-free.). These amounts show that cross-border shopping tourism is a major economic driver (Table V).

The following section looks at questions concerning the features of a potential new online platform and what respondents replied concerning their willingness to share personal data. In general, 33.5 percent of respondents could imagine using an online platform to obtain information about their destination. However, this platform must meet the following requirements: it must be simple to operate, provide the relevant information and have useful features. Based on the content analysis of the focus groups, the following features or functions should be included in the application (in descending order of importance):

1. real-time information that adds value to the cross-border experience (e.g. forecasts of traffic flow, parking situation or congestion in the city center);
2. ability to receive information on additional services (e.g. delivery service or customs clearance);
3. information about exclusive offers;
4. information about special offers;
5. search functions (e.g. to find products or offers);
6. information on discounts; and
7. comparison functions (e.g. prices).

Especially the first point is valuable since it confirms the need of customers for data that are available in real time.

Data disclosure is an issue of special importance. Only if users are prepared to disclose their data it is possible to improve the application based on user data, exchange information in real time, and, ultimately, create benefits and influence user behavior.

The exchange of information takes place, on the one hand, between the users themselves and, on the other hand, between the users and the application. Concerning the topic of data usage, three different clusters could be identified: people who mainly use Wi-Fi abroad and therefore refrain from using features that would incur costs; people who refrain from using mobile data because they are worried about their privacy, the costs incurred, the risk of draining their the cellphone battery and because the data would consume storage space (preferring to download data beforehand to use offline and using Wi-Fi while abroad); and people who generally not only use mobile data but also make use of free Wi-Fi offers to save costs.

Very few people (11.6 percent) are willing to reveal information about themselves on an online platform, such as (sorted in descending order of importance):

1. geographical data (current location);
2. data on travel behavior (e.g. favorite places or travel times);
3. data on shopping behavior (e.g. favorite shops or shopping times);

<table>
<thead>
<tr>
<th>Table V</th>
<th>Expenditure of shopping and leisure tourists per excursion</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Expenditure in EUR in %</td>
</tr>
<tr>
<td>400–5,000</td>
<td>9.7%</td>
</tr>
<tr>
<td>300–399</td>
<td>11.0%</td>
</tr>
<tr>
<td>200–299</td>
<td>22.3%</td>
</tr>
<tr>
<td>100–199</td>
<td>22.3%</td>
</tr>
<tr>
<td>55–99</td>
<td>24.7%</td>
</tr>
<tr>
<td>5–49</td>
<td>10.1%</td>
</tr>
</tbody>
</table>

Source: The authors’ presentation, online survey 2017
4. socio-demographic data; and
5. motion profile.

Most interesting, this is inconsistent with other studies that found out the contrary (O’Hara, Nguyen, and Haynes, 2014).

4.2 Interviews

The results of creating the typology are presented and interpreted below. This is followed by a discussion of the results.

As has been explained earlier while discussing the methodology, the segmentation criterion “type of stay” incorporates the two criteria “place of residence” and “place of overnight stay.” Table VI provides further details, cross-referencing them with the various types of stay (1.1–8.6). The classification of Table VI was applied to a survey identifying movement patterns of visitors in Konstanz, Singen and Radolfzell.

The places of stay within the areas of survey are not explored any further because the focus of this paper is on the “type of stay/activity” typology. For this typology, six activities (A–F) were identified. These were related to the different types of stay, resulting in the following typology (Table VII).

The most frequent “types of stay/activity” is the types of stay “resident of Konstanz,” “day visitor from the Lake Constance region, narrow, Switzerland,” “day visitor from the Lake Constance area, wide, Switzerland.”

<table>
<thead>
<tr>
<th>Table VI</th>
<th>Type of stay in Konstanz</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Place of overnight stay</td>
</tr>
<tr>
<td></td>
<td>No. of overnight stay</td>
</tr>
<tr>
<td>Place of survey</td>
<td>1.1</td>
</tr>
<tr>
<td>Lake Constance narrow, Germany</td>
<td>2.1</td>
</tr>
<tr>
<td>Lake Constance narrow, Switz.</td>
<td>3.1</td>
</tr>
<tr>
<td>Lake Constance wide, Germany</td>
<td>4.1</td>
</tr>
<tr>
<td>Lake Constance wide, Switz.</td>
<td>5.1</td>
</tr>
<tr>
<td>Germany</td>
<td>6.1</td>
</tr>
<tr>
<td>Switzerland</td>
<td>7.1</td>
</tr>
<tr>
<td>Other country</td>
<td>8.1</td>
</tr>
</tbody>
</table>

Source: The authors’ illustration, survey 2017

<table>
<thead>
<tr>
<th>Table VII</th>
<th>“Type of stay/activity” typology</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activities</td>
<td>Type of stay</td>
</tr>
<tr>
<td>1.1</td>
<td>1.1 A</td>
</tr>
<tr>
<td>1.2</td>
<td>1.2 A</td>
</tr>
<tr>
<td>1.3</td>
<td>1.3 A</td>
</tr>
<tr>
<td>1.4</td>
<td>1.4 A</td>
</tr>
<tr>
<td>…</td>
<td>…</td>
</tr>
<tr>
<td>8.6</td>
<td>8.6 A</td>
</tr>
</tbody>
</table>

Source: The authors’ illustration
region, far, Switzerland” and “German overnight visitor from Konstanz.” A comparison of types of stay shows that among guests from Switzerland, the activities A and B are the most common. The activities of the local residents are concentrated on the activities A to C. For the overnight visitors, the focus is on the activity C.

In the following, we examine the extent to which each of these four “types of stay/activity” varies according to mobility behavior, using the indicator “places visited on the survey day” as an example.

The results also show locations mentioned most frequently regarding the visitor’s movements. The Lago Shopping Center in Konstanz was named less frequently in favor of the Old Town/city center of Konstanz and Lake Constance itself. Mainau Island, a traditional attraction of the Lake Constance region, was mentioned more often here than other locations. This means that the Old Town of Constance is the main focus of all visitors’ movement patterns.

4.3 Focus groups

The following subsection deals with the findings of the focus groups. These were analyzed using tape-based analysis (Casey and Krueger, 1994). The moderator creates a written report based on a truncated transcript after listening to the tapes, reading the notes and debriefing the facilitator. This method has the advantage that it can be applied relatively quickly, while being mostly error-free.

In order to derive insights for an application, the focus groups were first asked to discuss how the group members plan a trip in advance. The participants of the focus groups were divided into two camps: some said that they plan their trip in advance, mainly because they travel as a family and especially with children. Others said they prefer to plan their trips on a daily basis and after they arrive, especially when it comes to individual travel, short city trips and traveling with friends.

The “advance planners” also differed from the “spontaneous travelers” with regard to the sources of information used. The “advance planners” use sources of information such as opinions, recommendations and tips from friends and acquaintances. They also use online services such as Google/Google Maps, city portals, TripAdvisor, YouTube videos, or hotel websites. They may also watch previews and documentaries on TV. Further, they may check satellite images online to see, for example, how far a hotel is from the airport and what sites are close by (e.g. museums, parks, highways, industrial sites, etc.). “Spontaneous travelers,” on the other hand, rely on information gained locally, from talking to locals and asking them for tips, from hotel receptionists and at tourist information centers. They might also take a tour on a sightseeing bus (hop-on hop-off bus) to get a first impression of a city. Weather forecasts, city or travel guides (physically and/or as an application), local newspapers and Facebook are also sources of information consulted by this type of visitor.

Applications used for travel planning by both groups can be classified into different categories: navigation/orientation, meeting people, gathering information, booking transportation, booking accommodation and searching for and booking activities. There is currently no application that combines all these needs and is also equipped with route suggestions.

In a next step, the groups were shown a mock-up and thus presented with an idea of an application that would allow tourists (and local residents) to move easily side by side. The respondents recognized not only the benefits but also some drawbacks of such an application. These are shown in Table VIII.

At this point, respondents also mentioned several important features that such an application would need to have in order to be more valuable. From a customer perspective, the application should include congestion messages (with a push feature) for tourist attractions, alternative route suggestions, enable the user to create a daily itinerary, get general city information and advice, (offline) maps and have a ticket booking system. The respondents were aware of the complexity of such an application and therefore suggested integrating this idea into an existing application. Above all, Google Maps was rated as the application that might be able to do this most effectively since this application already has features that are used by tourists (route planning, busy times/rush hour, waiting times and reviews). If the application meets requirements such as those
mentioned above, a majority of respondents would be ready to pay for it. The accepted price range varies from CHF1 for a location (country or city) to up to CHF20. The respondents would be ready to pay this in lieu of a printed travel guide.

5. Discussion

It can be concluded that price is the main reason why shopping tourists cross the border. Participants state that their demand for electronic devices, medical services, watches, jewellery and business travel will increase in the future. In addition, the demand for food and drugstore products will remain high. Consumers favor online platforms that offer information about their stay, guarantee easy operation, provide relevant information and have useful features. The analysis also shows that Wi-Fi is an important data access point for foreign tourists, who will switch off the mobile data function on their cellphones once they cross the border to avoid the high roaming charges. Finally, it must be emphasized that users of such an application will only disclose their data if they are assured that information about themselves is rendered completely anonymous.

Findings confirm that cross-border shopping and leisure activities are popular and engaged in frequently. Above all, however, the findings show that it will be a major challenge to develop an application that provides functional, informative and real-time data while fully anonymizing user information. These requirements will, in turn, make it difficult for the application to provide useful information.

It was also shown that customers appreciate the German border towns for their smooth flow of traffic and good parking facilities. This is surprising, inasmuch as media reports of traffic collapsing are frequent (Büchel, 2018; Rotzinger, 2018). An application could do much to relieve traffic congestion by controlling the situation. At the same time, however, users will need incentives to install and continue using it.

Due to the high costs residents of Switzerland have to pay when they use mobile data in the neighboring EU countries, it will be essential to offer extensive Wi-Fi capabilities. This will allow them to retrieve data free of charge that will help them manage their cross-border leisure and shopping activities. An offline feature providing historical data on traffic flow might be an added benefit in directing users and their activities while at the same time providing support for the local traffic infrastructure.

A comparison of the frequency distributions shows that the largest group of respondents are the residents of the respective place of survey. With regard to Konstanz, it is interesting to note that the majority of overnight guests stay exclusively in Konstanz, while overnight guests visiting Radolfzell and Singen are distributed across various places of accommodation in the Lake Constance region, in addition to the place of survey. Furthermore, Konstanz seems to be more popular among German guests as a place to stay overnight than the other two cities. With regard to Swiss visitors, it should be noted that they stay in Singen more frequently than in Radolfzell or Konstanz.

<table>
<thead>
<tr>
<th>Benefits</th>
<th>Drawbacks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less stress</td>
<td>Can overwhelm you</td>
</tr>
<tr>
<td>Incentives/goodies/benefits</td>
<td>Spontaneity is lost</td>
</tr>
<tr>
<td>Planning reliability</td>
<td>You do not meet new people</td>
</tr>
<tr>
<td>Managing tourist flow – less congestion at peak times</td>
<td>Needs data volume/hrs roaming costs</td>
</tr>
<tr>
<td>Time savings/less waiting time/more efficiency</td>
<td>The user becomes increasingly transparent</td>
</tr>
<tr>
<td>Better day planning</td>
<td>Uncertainty whether the live data are correct</td>
</tr>
<tr>
<td>Protection of infrastructure</td>
<td>Tourists are constantly on their cellphones/dependent on their device</td>
</tr>
<tr>
<td>Relief for local residents</td>
<td>Data protection and data handling</td>
</tr>
<tr>
<td>More space at sights</td>
<td>Concern that the application might have the opposite effect</td>
</tr>
<tr>
<td>Ability to be more creative</td>
<td>No more individual experiences – all tourists have the same experiences</td>
</tr>
</tbody>
</table>
The results show that there are differences between “types of stay/activity” with regard to the indicator “places visited on the survey day.” However, the sample sizes of individual types may be too small to draw reliable conclusions. The typology does, however, enable the identification of potential users of a tourist application to be developed and provides useful first information about the mobility behavior of the various types of visitors.

6. Conclusion and outlook

In an applied method mix, purchasing behavior, activities, movement patterns and the requirements for a mobile application for visitor guidance were determined. With regard to answering the research questions, it became clear that some shopping tourists combine their stay with leisure activities for an overall tourist experience. From a mobile application to be used for visitor management, users expect time savings through enhanced personal mobility in terms of real-time data on parking possibilities, traffic situation or high number of visitors/queues. To realize such a tool, it must be possible to provide such real-time data using suitable interfaces (e.g. Wi-Fi and mobile communication). In Europe, this raises data protection issues.

The mixed methods approach of qualitative and quantitative survey methods has proven useful in answering the two research questions in analyzing the needs and behavior of tourists in detail and in allowing some quantification and the identification of appropriate needs-based and behaviorally based segments.

Concerning the first research question on the activity and movement patterns of tourists, three different tourist groups have emerged among visitors from Switzerland. All groups are to some extent price-driven in their behavior, but at least one group combines shopping with recreational activities. The second survey also revealed clear differences in the patterns of activity and movement depending on the origin of the visitors, especially regarding the different importance of shopping and leisure activities. One conclusion is, in particular, that guests from outside the Lake Constance region are more attractive to leisure and tourism providers. One practical implication is, therefore, that care must be taken that especially overnight guests are not displaced by shopping tourists. This, in turn, underlines the importance of managing traffic flow, which is made easier by the fact that activities vary, at least in part.

Concerning the requirements for an application, in-depth qualitative indications and quantitative results were generated which show, on the one hand, a desire for price-related information, but also the potential to create a benefit for visitors through visitor flow management features.

For destination management organizations (DMO) within and beyond the research area (the Lake Constance region), the results are particularly relevant for destinations in two situations: first, where cross-border tourism is important and, in particular, where there are also large differences in spending power. In addition, destinations affected by overtourism will benefit most from the results.

The results show the necessity to cooperate within applications, within destinations and beyond. Above all, it is recommended not to offer the visitor management features as part of a separate application, but, if possible, to integrate them as additional features into an existing, proven application. In most cases, it will be very hard to generate enough users and to offer sufficient benefits for the application.

The requirement to generate enough benefits for tourists to use the application is interlinked with another finding. Both from a research methodological and a practical point of view the willingness to share data by the potential application users must not be disregarded. The clear result of this paper is that the subjective benefit of data sharing in the perception of tourists must be large enough to offset any privacy concerns. The use of external data like Google data could somewhat reduce this problem.

For cross-border tourists between Switzerland and EU countries, intensive use of any application is only realistic if the destinations provide free Wi-Fi. At the same time, how many mobile phones are logged into a specific router provides basic information of visitor movements and quantities. In this situation, Wi-Fi develops an additional importance for DMOs, especially as many destinations have little information on tourism flows.
The present paper is based on various surveys in the Lake of Constance region. Future research should validate, if the results can be verified in other regions as well. Additionally experiments within an existing application could test real reactions of tourists to the features suggested here. A major additional step could be allowed by the usage of observational data from existing applications or from the practical implementation of the above information regarding the application design and features. Observational data over a period of several years will, as a further research step, enable reliable predictions on movement patterns using predictive analytics. This would enable DMOs to react beforehand to estimated tourism flows and to reduce the negative effects of tourism flows to tourists and inhabitants alike.

References


Further reading


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Structural analysis of the tourism impacts in the form of future study in developing countries (case study: Iran)

Mohammad Nematpour and Amin Faraji

Abstract

Purpose – The purpose of this paper is to identify and prioritize the positive and negative impacts of tourism on the process of tourism growth at a national scale in Iran, by taking into account the reviews of previous studies, views of experts and structural analysis.

Design/methodology/approach – In this investigation, structural analysis technique has been used to identify the correlation between variables by using mix method data analysis. By using cross-impact analysis (N × N integer matrix) in the form of the Micmac method, the economic, sociocultural and environmental factors have been evaluated.

Findings – The results of the distribution of factors in the coordinate axes and the graphs between them indicate their features, and for reaching a sustainable system of tourism development, at first, priority should be given to the negative influential factors, especially the environmental fields, and then the focus should be on the decrease of the dual and risk variables as they cannot be anticipated.

Originality/value – For the rapid growth of tourism in many countries, governments ensure that policies have been heeded in designing and preparing general plans of the country to understand how the development trend is moving on. In this respect, arisen impacts of tourism system are one of the important issues during the development path and in the field of tourism future. Because of the complexity and broadness of tourism activities, these impacts have also many interconnected dimensions that should also be considered while studying tourism impacts.

Keywords Sustainable tourism, MICMAC, Structural analysis, Tourism impacts, Future study

1. Introduction

What will the future of tourism look like? How do we prepare for future situations? To have a competitive role in the current globalized tourism system, it is crucial for any company, institution or country to find good answers to these kinds of questions, as evidenced by the large number of foresight agencies, organizations and departments operating around the world. Nowadays, the need for future studies to make long-term planning and strategies for proper management has become necessary. This necessity has emerged, from the social, cultural, economic, environmental and technological opportunities and threats in most developing countries such as China, Brazil or India (Villacorta et al., 2014). The study of the future of tourism system is necessary for its planning and development. In addition, it is widely understood as a means to help managers to predict the future. Using future methods to help managers and policy makers to stimulate creative thinking to consider a wide variety of coherent descriptions of alternative hypothetical futures in a systematized way in the tourism system. These predictable actions will reflect different perspectives for present and future developments, which can serve as a basis for successive actions in the system (Amer et al., 2013).

The current global growth of tourism results in formulating strategic plans, long-term planning or development trends by governments to increase their contributions such that the tourism growth
is benefitted. In this respect, arisen impacts of tourism system are the important issues during the development of the system. The complexity and broadness of tourism system is necessary to study tourism impacts in a specific way (Mason, 2003, p. 42). Generally, impacts related to tourism could be examined in three fields: economic, sociocultural and environmental impacts, thereby affecting the economic, social, cultural and environmental circumstances of the communities (Aref et al., 2010). The concept of sustainable development in tourism tries to make a balance between sociocultural, economic and environmental impacts as much as possible. Hence, understanding the potential of tourism impacts in development process is the basic and logical assumption of sustainable tourism planning. However, lack of sustainability in tourism can cause excessive costs and emergence of various challenges. In most cases, forecasting of the future by using non-professional ways and without trend analysis can cause many problems in carrying out the plans; therefore, a systematic look at the subjects and using expert analysis of future trends can become an appropriate basis for decreasing the negative impacts and improving positive impacts in tourism realm.

Iran has a large number and wide variety of tourism attractions, giving it a strong potential for tourism development. To reach the goal of a successful sustainable tourism development, Iran needs careful planning, systematic implementation of the plans and a continuous and effective management. Today, tourism industry in Iran needs a scientific revolution and specific changes in its structures. In this respect, planning and policymaking in accordance with the national sustainable development of tourism, economic, sociocultural, and environmental situation and trends of the country is necessary.

The objective of tourism development in Iran must be set in a relevant context and should contribute positively to the achievement of the broad economic, social, cultural and environmental objectives of the nation and country. In this regard, Iran’s tourism cannot be planned or managed in isolation. Iran’s tourism, especially dealing with negative impacts of tourism on environment, culture and economy, needs to be viewed professionally by using logical thinking and some more reliable scientific methods in the field of scientific research and investigation for its development.

Generally, various future study methods, based on the nature of the procedures, can be classified into qualitative and quantitative (Amer et al., 2013). In this study, we focus on cross-impact analysis (CIA) as one of the most applied quantitative methods at a national scale (Gordon, 2009). A well-known variant of CIA method proposed by Duperrin and Godet (1973) and Godet (2000) is MICMAC, which has been successfully applied in many fields.

This study aimed to analyze Iran tourism system by considering the positive and negative impacts of economic, sociocultural and environmental aspects to find out the extent of sustainability or unsustainability of the system. Implementation of long-term planning based on these findings seems possible and feasible.

This study has tried to answer the following questions:

**RQ1.** What are the most important variables for systematic analysis of tourism impacts?

**RQ2.** What is the role of each variable under study in economic, sociocultural and environmental tourism?

The paper is structured in three steps: the first step describes the theoretical framework and foundations and literature relating to the perception of tourism impacts in host communities. The next step describes the methodology of the research. In the last step, both the research process and the results are discussed, and implications and recommendations are highlighted.

2. **Theoretical framework**

2.1 **Study area**

Covering a wide area in the Middle East, 1,648,195 km², and a population of approximately 80m (2015) (Figure 1), it is located between 25° 3’ and 39° 47’ N and 44° 5’ and 63° 18’ E, bordering Azerbaijan, Armenia and Turkmenistan in the north, the Persian Gulf and Oman Sea in the south, Iraq and Turkey in the west, as well as Afghanistan and Pakistan in the east (Foroutan et al., 2017).
Iran is a country with great history, ancient culture and a varied geography, which give rise to a wealth of substantial tourism potentials encompassing many national and man-made tourist attractions that present many activities for tourists (Ghaderi and Henderson, 2012). Iran’s spirited culture makes it much wealthier than a rich developing economy. However, Iran’s tourism industry has suffered from a wide range of issues over the past three decades, including the overdependency on oil revenues, political instability, the label of a terrorism-struck destination and poor management, making it unfavorable (Khodadadi, 2016). According to the current conditions in Iran, the existing gap between potential and reality tourist attractions leads to some consequences. The most important of these are the lack of infrastructure needed to support and facilitate tourism activities and the absence of a systematic tourism long-term planning and policymaking (Alavi and Yasin, 2000). Iran’s Cultural Heritage, Handicraft, and Tourism Organization (ICHTO) was established in 2004. This organization has the responsibility of tourism industry in Iran (Ghaderi and Henderson, 2012). Tourism, as a part of a systematic growth strategy, has the real and affordable potential to contribute significantly to the environmental, social, cultural and economic aspirations of Iran (Alavi and Yasin, 2000). Attempts to predict and have some perceptions of probabilities of future seem to be essential for all countries, but they are most crucial for Iran’s economy, society and culture. Communities seek to determine their futures whether through prophecy or systematic forms of scientific forecasting.

2.2 Tourism system

Since the present study tries to analyze systematically the impacts of tourism on economic, sociocultural and environmental fields, it is based on system theory (Beni, 2001; Leiper, 1990 cited in Mason, 2003). This theory is a fundamental one with a philosophical framework in long-term planning. From the system theory perspective, every phenomenon (animate or inanimate in world) is an organized collection of specific elements and relations, which is called a system. This system has a specific and meaningful function (Mahdizade, 2007, p. 40). In other words, the system is a complex whole, and its function depends on its components and interaction between them (Jackson, 2003). If we consider tourism as a system, then each one of its elements in reaching the goal is in a reciprocal relation and interaction, having influence/dependency on each other. For example, tourism seems to be an inter-systemic process such that its components have relation with each other. One of the main components is arisen impacts; its impacts are modeled as positive and negative in different sociocultural, economic and environmental dimensions.

Source: Godet et al. (2008, p. 61)
As mentioned above, each system consists of subsidiary systems or subsystems; in other words, each system functions as a part of a larger system. The main subsystems are known as structure and larger systems as system environment. These systems are in mutual interaction (Mahdizade, 2007, p. 40). System theory focuses on order and relation between sections and the way they function. Subjects like course of sections’ organization and how they are related to each other define the properties of the system. In other words, in addition to set of sections and relations that define the components of the system, the environmental and external factors of the system are also effective in making the whole system (Chikere and Nwoka, 2015). On the contrary, there is no system in void and obviously each system belongs to external environment and a larger system such as industry, economy and society (Weihrich et al., 2008).

Beni (2001) presented his tourism system as an open system that can influence and be influenced by the other systems with which it interacts. This system is composed of three sets:

1. Environmental relationships are composed of external settings in tourism system, which include cultural, social, ecological and economic subsystems. Each one of these external settings is influencing internal elements.

2. The structural organization consists of the superstructure and infrastructure subsystems.

3. Operational actions contain the dynamics of the tourism system. They include supply, market, demand, production, distribution and consumption subsystems. This holistic approach can be considered in all components and dimensions. Tourism seems to be a dynamic and open system that has effects on supply and demand. From an overview perspective, the tourism market, as well as infrastructure and superstructure are systemically affected by their environment. In other words, the aim of system is to understand the operation of tourism and present the systems that precede it. This system explains each of the elements of tourism from its interrelation with other disciplines and the origin of controlling and dependent subsystems. Tourism System (SISTER) is introduced as a set of procedures, ideas and principles, and ordered logically with the intention of seeing the operation of the tourist activity as a whole.

2.3 Tourism impacts

Tourism is one of the important types of human activities that has important impacts on local community. These impacts on destination societies, where tourists are in touch with living, economic and sociocultural environments of these societies, are conspicuous and visible. Therefore, categorizing tourism impacts in three categories, sociocultural, economic and environmental, is typically an accepted practice (Mason, 2003, p. 29):

1. Economic impacts of tourism: generally, economic dimension is the most important reason for the positive attitude of local community toward tourism. However, this economic dimension can include the evaluation of positive and negative aspects depending upon the level of development of countries. Some of these impacts are as follows: increase in income (Andereck et al., 2007), generation of employment opportunities (Deery et al., 2012), improvements in community infrastructure and public facilities (Yoon et al., 2001), seasonality (Wu and Chen, 2015) and so on.

2. Sociocultural impacts of tourism: these impacts are defined as factors influencing customs, habits, social life, beliefs and values of native inhabitants of tourism destinations. Interactions that take place between local people and tourists can result in new social and cultural opportunities for both sides or, on the contrary, can generate feelings of distress, pressure, congestion, etc. (Andereck et al., 2005).

3. Environmental impacts of tourism: tourism can result in preserving and protecting the resources or can result in destruction or damaging of resources with attractive, yet fragile, settings. These impacts can be in form of pollution increase, improvement of the appearance of host community, etc. However, negative environmental impacts are ignored by local community in favor of tourism advantages (Yoon et al., 2001; Liu and Var, 1986).

In passing, it should be noted that confronted by research in the triple impacts of tourism is the dominance of a quantitative paradigm that has not facilitated a deep and clear
understanding of the impacts and how these impacts were formed. The research tries to date and provide lists of impacts, more importantly, a deep understanding of future impact trends in the tourism system and how these could be conducted in the future of the tourism system, if necessary.

2.4 Sustainable development of tourism

Generally, sustainable development is a development that meets the needs of the present without compromising the ability of future generations to meet their own needs (Brundtland, 1987). Another definition of sustainable development given by Co-operation and Development (2001) is about the coordination of economic, social and environmental aspects (Dias et al., 2014; Shaker and Sirodoev, 2016). This also applies to tourism, wherein the basic concepts of general sustainable development have been gradually translated into the concept of sustainable tourism development (Postma and Schmuecker, 2017). From the point of view of WTO[1], the core principles of sustainable tourism development are as follows: to provide high-quality experience for visitors; to maintain the quality of the environment; and to improve the quality of life of the host community, on which both the host community and the visitors depend (Mill and Morrison, 2002). In this respect, local governments should be more careful and responsible to the local people and visitors who may be affected by tourism in all its positive and negative manifestations (Burns and Holden, 1997).

2.5 Importance of future studies

In general, futures studies refer to the scientific study of future developments in the terms of possibility, desirability and probability. There are two different attitudes of the future in developed and developing countries: knowledge-based society and sustainable society. In developing countries, the concept of sustainable development is commonly found according to the need to maintain the fundamentals of existence and production, worldwide and on a long-term basis, and to distribute the profits of natural and scientific technological resources more fairly (Kreibich et al., 2012). In terms of planning the future, forecasting functions are just one approach among many that are essential to develop a good plan. Most of the planners use the future study to help in planning for the future and for policymaking and strategic planning. Future studies cannot always be beneficial and effective. Sometimes, they challenge the current framework and circumstances, and they can also be more disruptive instead of seeking to make strategy more effective (Inayatullah, 2013). Future planning seeks to collect, integrate and link relevant information to provide effective and organized solutions for building strategy and reaching it. Furthermore, using tools for analysis of behavior and forces of social actors and crucial variables in order to develop strategies is the main goal of future studies (Apodaca, 2001; Georgiou et al., 2012). Generally, as claimed by Glenn, future would never been known or anticipated accurately and completely. In this regard, intention to research the future must be explored, created and investigated systematically, and desirable future can be attained by improving policy decisions (Glenn, 2003).

2.6 Cross-impact analysis

There are many future research methods, ranging from qualitative to quantitative or simplistic to complex (Glenn and Gordon, 2003). There are many criteria regarding the choice of the methods of future studies. The choice must be depend on the existence problem, potential resources and the level of progress of planners. There are some important and best-known methods in this field of study, including the Delphi method, scenario writing, simulation and CIA (Schnaars, 1987).

Although the future is a perspective event, caused by the interactions of many dynamic and evolving events over time, producing information only in an isolated way is the fundamental limitation of numerous futurology-based research methods. It means that events and developments are surveyed without considering their possible impact on each other. To examine the behavior of a system in the future, a set of variables, crucial to systematically explain the system and their relationships that will shape the future, needs to be analyzed. These interrelationships between system’s variables are called cross-impact (Asan and Asan, 2007a, b). The cross-impact is the best-known method used to analyze interrelationship between the variables. For systematic description of all potential modes of interaction between a given set of
variables and for the assessment of the strength of these interactions, the CIA method is used (Schlange and Jüttner, 1997).

Theodore, Gordon, and Olaf Helmer were the first ones who originally developed the cross-impact method (Gordon and Hayward, 1968). Since 1966, several researchers have developed many versions of CIA method (Duperrin and Godet, 1973; Godet, 2000; Gordon, 2009). According to the previous studies, three groups of these versions can be categorized: quantitative, qualitative, and mixed method CIA. There is a big difference between quantitative and qualitative versions; that is, mathematical model relating to the variables (quantitative) and experts’ estimates of the relationships – probabilities or impact – among the variables (qualitative) (Duperrin and Godet, 1973). The aim of the CIA is to reduce the complexity of the system and to identify the important and key variables that should be studied. There are some important steps in this classification. The exploration of the key and crucial variables means that any change in key variables will affect the whole system and they will have more importance in the future of the system (Schlange and Jüttner, 1997).

2.6.1 Structural analysis. We can explain the structural analysis as a system that has a set of interrelated variables. In this system, there is a network of the interrelationships between variables, and their analysis is essential to understand the evolution of the system in the future (Chine et al., 2017). From the point of view of the structural analysis functions, we can point out to identify the structure of the relationships between the quantitative and qualitative variables, which characterize the system under study (Chine et al., 2017). Furthermore, we can describe a system by using an interconnect matrix in structural analysis. The important output of structural analysis is the identification of key variables controlling the evolution of the system under study (Chine et al., 2017).

The structural analysis is based on the CIA method. In fact, the structural analysis method is a variant of the original CIA method, taking into account not only the direct relations but also the indirect ones (Cabrera et al., 2002).

2.6.2 Structural analysis with MICMAC method. The MICMAC (cross-impact matrix multiplication applied to classification) is a method for structural analysis and a well-known variant of CIA method proposed by Duperrin and Godet (1973) and Godet (2000). This method is aimed at determining the most important variables within a system among a set of variables, initially specified by an expert committee, and it analyzes the importance of a given set of variables through a matrix. In other words, the experts define the key variables of the system to establish their role in the system (Villacorta et al., 2014). The MICMAC method consists of the following three phases (Arcade et al., 1993):

1. gathering the inventory of variables;
2. describing of the relationships between variables; and
3. the identification of key variables.

To describe the relationship between variables in phase (2), an \((n)\times(n)\) integer matrix in a quantitative form must be sounded by an expert panel. This matrix is known as MDI or matrix of direct influence. Each cell of \(MDI\) shows the impact of each “\(i\)” variable on “\(j\)” variable. The numbers from 0 to 3 give value to these impacts and are described as follows: number 0 shows no relation between variables, number 1 shows weak relation between variables, number 2 shows moderate relation between variables and number 3 shows strong relation between variables.

Identifying the key variables is a very important step that shows the level of variable’s importance through the integer matrix. Outputs show the type of impacts and their relationship to others, and this has a vital role in presenting the best management planning.

There are two procedures to accomplish this: direct and indirect. In accordance to the nature of the data, analysis has been done by using the direct method. The direct method ranks the variables according to their direct influence/dependence on/of the others. In this regard, the elements of MDI matrix in the form of the \(k\)th row and \(k\)th column have been added by MICMAC to obtain the global direct influence. As said above, we can have following formulas:

\[
l_k = \sum_{j=1}^{n} MDI(K,j),
\]
and dependence, in the form of:

\[ l_k = \sum_{i=1}^{n} \text{MDI}(i, k), \]

of the \( k \)th variable, respectively.

With this information, an influence ranking \( N_I \) and a dependence ranking \( N_D \) are built by sorting the variables decreasingly according to their influence and dependence. Both rankings serve as a first indicator of the importance of each variable in the system (Villacorta et al., 2014; Asan and Asan, 2007a, b).

According to analysis and outputs resulted from MICMAC, the chart is a two-dimensional map where the vertical axis represents the degree of influence variables and horizontal axis represents the degree of dependence. The axes divide at four quadrants and five zones; in other words, the variables are located at five zones and are divided in the following five categories (Villacorta et al., 2014; Asan and Asan, 2007a, b; Godet et al., 2008; Saricam et al., 2012):

1. Input/Influential variables: these variables are inputs, they are located at northwest part of the chart and the most of the system is dependent on them. In fact, the level of influence of these variables on other ones is much higher than the level of their dependency in future. In other words, system is strongly dependent on these variables and they are defined as determinative and key variables of system behavior, and therefore they are called as the main drivers of system.

2. Intermediate variables: these variables are in the northeast part of chart and can be very influential and very dependent at the same time. Due to their unstable nature, they may have influence on other variables and sometimes even depend on influential variables.

3. Output/Dependent variables: these are resultants, they are located in southeastern part of the chart and have a low level of influence and high level of dependency. In other words, they are sensitive to influential and intermediate variables’ changes. In addition, they are considered as output variables in the system.

4. Excluded variables: low level of influence and dependency is considered a characteristic of these variables in the southwestern part of the chart. They are identified as independent variables in the system. These variables seem to be completely out of chart. Basically, they neither can interfere in the system’s function nor use the system. In other words, they have little influence on the system.

5. Clustered variables: they have been introduced as variables, such that the system cannot make certain decisions about them. In other words, because of their placement in border areas of each four sections, the possibility of these variables joining one of the four sections is high.

3. Methodology

The study period spanned from November 2015 to September 2016. In this work, we focus on perspective structural analysis in the form of CIA (Gordon, 2009). As pointed out previously, the perspective structural analysis is a method that normally developed in three phases: inventory of the variables, describing the relationships between variables and identifying key variable by analyzing the variables and their relationships (Arcade et al., 1993).

3.1 Phase 1: listing the variables

Perspective structural analysis is based on expert’s opinions; thus, identifying people with a good knowledge of each structural analysis was critical. In this regard, a purposive sampling method was used to choose the experts; a purposive sampling is a non-probability sample that is selected on the basis of the characteristics of a population and the objective of the study. This kind of sampling is also as judgmental, selective or subjective sampling. Purposive sampling strategies differ from probability (or random) sampling strategies. Researches must be able to explain the use of purposive sampling in any particular study and discuss the implications for the research results (Devers and Frankel, 2000).
The reason for applying a purposive sampling in this paper is selection of a group of experts who have a deep understanding or are information rich in a specific field (Neuman, 2007), and they can provide full insight into the research questions (Devers and Frankel, 2000). Akins et al. (2005) pointed out that panels have been conducted with just about any size. Typical panels seem to fall in the category of 10–100 members and consist of either two or three expert groups, again depending on stakeholder interest (Avella, 2016). Thus, the sampling size of the study consisted of 27 experts as academicians. They were decision-makers, professionals and consultants at the same time, in the fields of tourism, economy, geography and urban and regional planning. These experts were chosen among academic staffs of Tehran University and Science and Culture University (Table AI).

The next step in this phase is compiling a list of the most relevant variables in the system. Generally, list of variables does not exceed 70 or 80 variables (Chine et al., 2017). Then, the final variable list is decided by consensus, and each variable of the research must be clearly defined, characterized and understood by all participants. To achieve the goal of the study, we only need to measure the direct relationships between the indicators; this is achieved through the MICMAC method (Arcade et al., 1993).

3.2 Phase 2: describing the relationships between variables

The data collection tool was a self-developed questionnaire designed in the form of CIA matrix whose variables were determined by the first phase. The variables identified in the first phase were entered in the analysis matrix, and the experts determined the degree of influence/dependency between them. Indexes used in this study cover economic, sociocultural and environmental impacts of tourism. The collected data were categorized on the basis of known factors to understand the level of variables’ impacts on each other and to understand the necessity of systematic analysis in Iran’s long-term planning for tourism. In this phase, strategic variables that contributed to Iran’s tourism development were categorized and analyzed. For this purpose, CIA method using MICMAC method was performed to assess the influences between variables (from 0, no influence, to 3, strong influence) (Dewangan et al., 2015). Figure 2 shows a hypothetical example of analysis matrix for five hypothetical variables, V1–V5; this is an example of an influence interrelation network: V1 → V2 indicates that V1 influences V2.

The sign (positive/negative) of each influence is recorded (to be used in the final analysis) but not introduced in the matrix, because this would make the next analysis impossible.

3.3 Phase 3: identifying the roles played by the variables

In this phase of structural analysis, we use the MICMAC software to calculate direct influence and dependence of each variable (the sums of each row and column, respectively). The MDI is then
increased to the second, third, …, nth power, until the overall rating of the influence and dependency of
the variable remain constant. The outputs of MICMAC show that direct and indirect influence/dependency maps can be plotted, revealing variable clustering. Their positions indicate the different functions played by variables in the system (input/influential variables, intermediate variables, output/dependent variables, excluded variables and clustered variables). These maps show the present and future participants’ understanding of the system and what they perceive as potentialities (variables with high influence and dependence capacity), opportunities (variables with medium influence and dependence capacity) and constraints (variables that cannot be influenced) for change. Structural analysis also identified networks or loops of interrelated variables through the construction of influence graphs (Delgado-Serrano et al., 2016).

4. Finding and discussion

According to Table I, the list of understudied variables for structural analysis (positive and negative tourism impacts on economic, sociocultural and environmental fields) is presented. In other words, in this study, experts initially defined 56 variables to be considered in the analysis, which can be found in Table I; these 56 variables were detected as primary variables and were analyzed by Micmac software. The matrix dimensions for positive economic impacts were (11 × 11), for negative economic impacts were (8 × 8), for positive sociocultural impacts were (10 × 10), for negative sociocultural impacts were (12 × 12), for positive environmental impacts were (6 × 6) and for negative environmental impacts were (9 × 9).

According to the nature of plotted maps (Figure 3) and identified networks or loops of interrelated (influence graphs) (Figure 4), the tourism system and its related variables are given as follows.

Input variables in northwestern part including source of foreign exchange (V3), earning job diversity and the creation of new business opportunity (V5), helping to boost GDP (V6) and thriving local market (V8) are considered as determinative and influential variables that influenced many other economic variables in the system. On the other side of this table and in its northeastern part of the map, intermediate or strengthening variables including increase in income (V1), direct and indirect employment opportunities creation (V2), investment improvement (V4) and infrastructure improvement (V10) are found. These variables in some cases can have influence even on influential variables. Among this group of variables, improvement of investments and income increase because of their own unstable characteristic and potential to change into variables playing the main role in the system are considered as a potential breakpoint for the system. Due to these characteristics, risk variables are their secondary name. In addition, the creation of job opportunities and infrastructure improvement variables are considered as target variables and from a systematic plan as intended variables. Both of them can be considered crucial factors in the way of sustainable tourism development of the Iran. These variables instead of predetermined goals indicate general goals for the whole system. In southeastern part of the map, assistance in poverty reduction and wealth distribution in better ways (V9) and improvement in the quality of life (V9) can be seen as output variables of the system. These variables have a high level of dependency and low level of influence. In other words, they have a special sensitivity toward the changes occurring in influential and intermediate variables. In southwestern part, there are variables that have least dependence and influence that seem to be out of system and have the least interference in the future of system. Competitiveness (V7) in Iran tourism industry has this characteristic.

According to systematic relations between variables related to positive economic impacts of tourism system, these variables can be shown in an identified network or loop of interrelated (influence graphs) (Figure 4). Based on what is shown in this graph, most of the variables have a mutual relationship with each other. Only in cases such as source of foreign exchange (V3), poverty decrease, wealth distribution (V9), strong and strongest direct influences do not exist, and these variables have weak and weakest direct influences.

The negative economic status and impact of tourism is show in Figure 5. Input variables in northwestern part of the map including scarcity of some essential commodities in tourist seasons (V18), attracting non-local workers for the lack of local’s knowledge and expertise (V19), represent influential variables. In northeastern part of the map, variables like increases in the price of real estate and land (V12), raising the costs of living (V13), inflation (V16) and overdependency on tourism without considering other expenses opportunities (V17) are considered...
<table>
<thead>
<tr>
<th>Dimension</th>
<th>Variables</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Economic</strong></td>
<td>V1_Increase in income</td>
<td>Dogru and Bulut (2018), Marzuki (2011)</td>
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<td></td>
<td>V2_Direct and indirect employment opportunities creation</td>
<td>Deery et al. (2012), Gursoy et al. (2007)</td>
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<td></td>
<td>V3_Source of foreign exchange earning</td>
<td>Edwards et al. (2008), Esmaeil Zaei and Esmaeil Zaei (2013)</td>
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<td></td>
<td>V4_Investment improvement</td>
<td>Johnson et al. (1994), Liu and Var (1986)</td>
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<tr>
<td></td>
<td>V5_Job diversity and the creation of new business opportunity</td>
<td>Deery et al. (2012)</td>
</tr>
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<td></td>
<td>V6_Helping to boost GDP</td>
<td>Edwards et al. (2008)</td>
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<tr>
<td></td>
<td>V7_Competitiveness</td>
<td>Lee et al. (2003), McGehee and Andereck (2004)</td>
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<td></td>
<td>V8_Thriving local market</td>
<td>Edwards et al. (2008)</td>
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<tr>
<td></td>
<td>V10_Infrastructure improvement</td>
<td>Choi and Sirakaya (2008), Marzuki (2011)</td>
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<td></td>
<td>V11_Improvement in the quality of life</td>
<td>Wuwara-Mbugua and Cornwell (2008)</td>
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<td></td>
<td>V12_increases in the price of real estate and land</td>
<td>Easterling (2008), Deery et al. (2012)</td>
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<td></td>
<td>V14_Seasonality of tourism and the lack of job security</td>
<td>Tohidy (2011)</td>
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<td></td>
<td>V16_Infantilization</td>
<td>Uysal (2015)</td>
</tr>
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<td></td>
<td>V17_Overdependency on tourism without considering other expenses opportunities</td>
<td>Deery et al. (2012)</td>
</tr>
<tr>
<td></td>
<td>V19_Atracting non-local workers for the lack of local knowledge and expertise</td>
<td>Uysal (2015)</td>
</tr>
<tr>
<td><strong>Sociocultural</strong></td>
<td>V20_Improvement in the quality of educational, recreational, social and health facility</td>
<td>Deery et al. (2012), Zhou (1986)</td>
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<td></td>
<td>V21_Cultural development and public awareness</td>
<td>Sharpley (1994)</td>
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<td></td>
<td>V22_Branding the region</td>
<td>Tosun (2002)</td>
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<td></td>
<td>V23_Reduction in migration pressures</td>
<td>Deery et al. (2012)</td>
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<td></td>
<td>V25_Exchange and promotion of local culture</td>
<td>Lundberg (2016), Sharma et al. (2008)</td>
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<td>V26_Enhancement in the level of safety and security</td>
<td>Hall et al. (2004), Aref (2011), Deery et al. (2012)</td>
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<td></td>
<td>V27_Increase in participation and social capital</td>
<td>Jaafar et al. (2017), Williams et al. (1995)</td>
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<td>V28_The revival of local values</td>
<td>Burns and Holden (1997)</td>
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<td>V30_Increasing social gap phenomenon</td>
<td>Andereck et al. (2007), Goeldner and Ritchie (2012)</td>
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<td>V31_High population, density, overcrowding and increase the volume of traffic</td>
<td>Dyer et al. (2007)</td>
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<td>V32_Reducing mental capacity of Iran’s tourist destinations</td>
<td>Deery et al. (2012), Getz (2008)</td>
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<td></td>
<td>V33_Increase in social disorders</td>
<td>Jackson and Inbakaran (2006)</td>
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<td></td>
<td>V34_Changing the demographic composition</td>
<td>Choi and Sirakaya (2006)</td>
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<td></td>
<td>V35_Increase in health problems</td>
<td>Wu and Chen (2015)</td>
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<td></td>
<td>V36_Distortion of local values</td>
<td>Deery et al. (2012); Getz (2008)</td>
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<td></td>
<td>V37_Increase in problems of local residents to use public services and facilities</td>
<td>Wu and Chen (2008)</td>
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<td>V39_Demonstration effects</td>
<td>Cui and Ryan (2011)</td>
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<td></td>
<td>V40_Commodification of the culture</td>
<td>Burns and Holden (1997)</td>
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<td></td>
<td>V41_Weakening the social philanthropy relationships</td>
<td>Perez and Nadal (2005)</td>
</tr>
<tr>
<td><strong>Environmental</strong></td>
<td>V42_Increase in environmental awareness</td>
<td>Chiu et al. (2016); Deery et al. (2012), Getz (2008)</td>
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<td></td>
<td>V43_Promotion of green architecture</td>
<td>Holden (2009), Chiu et al. (2016); Inskeep (1991)</td>
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<td></td>
<td>V44_Improvement of the quality of the environment</td>
<td>Deery et al. (2012), Zhou (1986)</td>
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<td></td>
<td>V45_Increasing the level of green zones such as parks etc.</td>
<td>Holden (2009), Vishwanatha and Chandrashekara (2014)</td>
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<td></td>
<td>V47_Prohibited area and protected areas to attract more tourists</td>
<td>Rizal and Asokan (2014), Zhou (1986)</td>
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<td></td>
<td>V48_Increasing air and water pollution</td>
<td>(continued)</td>
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<tr>
<td></td>
<td>V49_Noise and visual disturbance (visual pollution) and olfactory pollution</td>
<td>(continued)</td>
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as intermediate variables. Among these, variables such as overdependency on tourism without considering other expenses opportunities, inflation and increase in land price have a high potential to become main variables and are specified as risk variables. In addition, raising the costs of living is recognized as a target variable. As Figure 5 demonstrates, there is no variable in southwestern part of the map. In other words, no variable can be found that has a special sensitivity toward changes in influential and intermediate variables. In southwestern part, variables with the least influence and the least dependence can be seen. These variables, somehow, have the least interference in the system work. Seasonality of tourism and the lack of job security (V14) and tourism revenue leakage (V15) are present in this area of the system’s map. Figure 6 demonstrates the existing interrelationships between variables in form of a graph, and it represents the intensity of mutual relations between variables.

According to outputs (positive sociocultural variables) gained from MICMAC software in Figure 7, there is no influential or dependent variable in northwestern and southeastern of the map. In northeastern part, variables like cultural development and public awareness (V21), branding the region (V22), identity construction and community attachment (V24), exchange and promotion of local culture (V25), the revival of local value (V28) and creation of desirable image of host community (V29) are considered as intermediate variables. In addition, creation of a desirable
image of host community is specified as a risk variable and region branding as a target variable. In southwestern part of the map, reduction in emigration pressures (V23) is considered as a negligible variable. From the system stability perspective, the distribution in the risk line of the map shows unstable conditions and unexpectedness of system behavior. Therefore, this manner of distribution and placement can be defined as an unstable system. Also, Figure 8 represents
the interrelationships of many variables as having mutual and strongest strong/influence. Among those some variables such as reduction in emigration pressures, enhancement of the level of security and safety, improvement in the quality of educational, recreational, social and health facility have weakest influence on each other and another variables.

In Figure 9, high population density, overcrowding and increase in the volume of traffic (V31) and change in the demographic composition (V34) are considered as influential variables.
Increasing social gap phenomenon (V30), distortion of local values (V36), consumerism (V38), demonstration effects (V39) and weakening of the social philanthropy relationships (V41) are highlighted as intermediate variables. Among them, increasing social gap phenomenon is specified as a target variable. The reduction in the mental capacity of Iran’s tourist destinations (V32), increase in social disorders (V33) and commodification of the culture (V40) are specified as
dependence variables of the sociocultural negative impacts system. Furthermore, two variables – increase in health problems (V35) and increase in the problem of local residents to use public services and facilities (V37) – are recognized as negligible variables. Figure 10 demonstrates the interrelationships of the variable of sociocultural negative impacts system. Variables such as high density of population, increase in local community problems, change in population composition and increase in social disorders have strong/strongest influence.

Based on outputs, positive tourism environmental variables are represented in Figure 11. Results showed that the system is partly stable. In other words, increase in environmental awareness (V42) and improvement of the quality of the environment (V44) were introduced as influential and dependent variables, respectively. In addition, promotion of green architecture (V43) is specified as a risk variable. In this system, increasing the level of green zones, such as parks, etc., (V45), is highlighted as a target variable. Furthermore, management of waste products (V46) and creation of hunting prohibited area and protected areas to attract more tourists (V47) were recognized as independent (negligible) variables. Figure 12 states that an increase in environmental awareness, improvement of the quality of the environment, promotion of green architecture and an increase in the level of green zones, such as parks, are the variables that have strong/strongest influence.

Finally, Figures 13 and 14 explain the negative environmental impacts system in Iran. As shown by spotted map, the open spaces reduction due to uncontrolled construction (V51) is specified as an influential variable. Furthermore, the decrease of national resources per capita and increase of different pollutions were identified as dependent variables. The destruction of natural and historical resources due to uncontrolled tourism development (V50) and ecosystem degradation and vegetation destruction (V56) are specified as intermediate variables (risk variable and target variable, respectively). On the contrary, the decrease in physical tolerance capacity is identified as secondary leverage and soil density and erosion (V53) and also an increase in waste generation (V52) are specified as independent variables. Figure 14 shows that the interrelationships between variables have a strong/strongest influence.

5. Conclusions

In this study, a novel methodology has been presented with a long-term planning in the form of structural analysis. The purpose of structural analysis is to explore the key variables of a system
and identify their influence or dependency, thereby playing role in reducing system complexity, and subsequently, it can be helpful to consider the future of evaluating strategic decisions (Benjumea-Arias et al., 2016).

To study the future of tourism system and to set a propitious long-term planning, we should consider the concept of system; system theory is relatively a comprehensive approach to
understand and analyze tourism phenomenon and to plan tourism more dynamically. In this approach, sections and factors having influence on tourism like tourists, host communities, relevant companies and organizations, environment, etc., can be examined and analyzed in an appropriate way. In other words, the system approach reflects the reality and nature of
tourism as a coherent whole and discusses the connection between components and elements of supply section in tourism. Anyway, looking into Millennium Development Goals in 2000 and Sustainable Development Goals in 2015, the importance of systematic view in tourism development and its impacts can be easily understood. Doubtlessly, tourism and its related activities, besides irrefutable positive impacts, have negative dimensions and impacts. The positive impacts should be maximized and the negative impacts should be minimized with help of planning. However, the following question arises: what Iran pays attention to in its economic dimensions, especially positive impacts of tourism? This is due to weakness in economic system structure, considerable population migration from village to city and even from small cities to big cities, emergence of different challenges like unemployment, crimes, social disorders, traffic, boost in expansion of unauthorized residents, destruction of environmental resources, etc. In this study, what has been put under scrutiny is systematic view – of course not comprehensive – of variables related to both positive and negative aspects of economic, sociocultural, and environmental impacts. Maybe this study has been able to answer the following question: “how can we manage and organize tourism in a way to have the least negative impacts in aforementioned fields?” As it can be seen in Table I, the most important negative and positive impacts (variables) are categorized in three indicated fields. Based on examinations done in the economic field, the most important positive influential impacts include source of foreign exchange earnings, job diversity and the creation of new business opportunity, helping to boost GDP and thriving of local market. Among these variables, local market thriving has higher level of importance, as it is recognized as a discouragement for emigrating inside and outside of tourist destinations. In fact, all aforementioned impacts (variables) have interrelationships with each other and they create the butterfly effect, so that thriving of local market can lead to new employment opportunities, for establishing new small businesses and creation of some new services. The distribution of variables within the graphs represents the stability and instability of every system. Variables shown in (L) form represent a stable system, and this state of system shows stability in influential variables and continuity of their influence on other variables. If the variables are distributed in (diamond) form like the right graph, the system is unstable, and a lack of influential variables threatens the system.

When the positive economic impacts are examined, variables distribution model represents a relative stable system; however, variables like investment improvement, income increase, job creation and infrastructures development are in an unstable state. Concerning negative economic impacts, attracting non-local work force and scarcity of some necessary products were recognized as the key influential factors. Variables distribution showed an unstable system in negative economic impacts of tourism. In this regard, variables like land commodification, rise in inflation and increase in living costs can be mentioned.

In the field of positive sociocultural impacts, cultural development, increase in people’s awareness, identity construction and community attachment, community belonging, and reviving local values were specified as intermediate factors. The distribution of positive sociocultural impacts showed a complete unstable system, and this fact indicated an uncertain influence and a dependency of variables in this field. In the field of negative sociocultural impacts of tourism, high density of population, congestion and crowdedness along with influential change in demographic composition were specified as influential factors. Planning for identified areas can surely eliminate some tourism negative impacts in sociocultural field. The existence of some variables like distortion of local values, consumerism, demonstration effect and social gap increase is strongly in an intermediate state, and this fact has made the system behavior unpredictable.

In the field of positive/negative environmental impacts, a relative stable system can be seen. From the positive impacts’ perspective, the increase in people’s awareness about environment was identified as a positive influential variable. From the negative impacts’ perspective, the destruction of natural and historical resources due to uncontrolled tourism development and open spaces reduction due to uncontrolled construction were identified as negative influential impacts. According to the findings of this research, tourism in Iran from the perspective of sociocultural impacts’ system is strongly unstable. This issue is clearly visible in tourism destinations. The enormous role of long-term planning for the optimization of actions and considering the key variables of the system might improve the future of the sociocultural system.
Finally, we are cautiously optimistic about the future use of the method and its potential contribution to sound sustainable development of tourism in these communities. The bases have been established and the decision-makers have shown their agreement and confidence in the process and the results.

5.1 Implications and limitations

The theoretical and practical limitations of the research are all issues that have been challenged in front of researchers during the research. Based on the research, important and influential limitations of this study are as follows:

1. The present study is the first study that has tried to forecast the tourism’s impacts in the form of structural analysis. Therefore, the lack of similar research in the field of tourism has prevented the researchers from being aware of the problems of doing such work.

2. As with any method that is the favored approach of the group, by applying structural analysis, the authors must note that a precise choice of participants is a critical step for employing this technique. Therefore, by dominating competencies within the group, the results can be strongly biased, and in this regard, setting up a multidisciplinary team is necessary. In other words, implementing a structural analysis is a rather big operation necessitating experts’ availability. So finding out experts who have enough knowledge about tourism science and future studies methodology, especially CIA, was the main challenge in front of researchers.

3. In this analysis, process must be stressed that the group can always make collective mistakes.

5.2 Suggestions

The research suggestions will improve the management and planning of tourism in Iran. Therefore, this research offers suggestions to the ICHTO[2]. Based on the research, we have put forward the following suggestions:

1. First, the ICHTO must adopt a strategic approach about the tourism. If the decision-makers have deep awareness regarding positive and negative impacts of tourism, they definitely will pay more attention to the programs and policies, because the necessity of attention to the tourism industry is evident in all documents of the organization’s vision and mission.

2. By attracting the tourism expert labor in ICHTO and relevant organizations, the tourism planning will be done with more expertise and seriousness. Therefore, the adopted programs and policies will have an effective performance.

3. Cooperation and special partnership of tourism between responsible and operating organizations will result in having fewer challenges in implementation of tourism programs and strategies.

Notes

1. World Tourism Organization.
2. Iran Cultural Heritage, Handicraft and Tourism Organization.

References


Jackson, M.C. (2003), *Systems Thinking, Creative Holism for Managers*, John Wiley and Sons, Chichester.


Further reading


### Table AI
Profile of experts

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<tr>
<th>Participants</th>
<th>Education</th>
<th>Organizational position</th>
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<tr>
<td>P1</td>
<td>PhD in urban planning</td>
<td>Assistant Professor, Faculty of Geography at University of Tehran</td>
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<tr>
<td>P2</td>
<td>PhD student in economic science</td>
<td>PhD Student in Economic Science, Faculty of Economics at University of Tehran</td>
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<td>P3</td>
<td>PhD in tourism planning</td>
<td>Assistant Professor, Faculty of Tourism Management at Science and Culture University</td>
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<td>P4</td>
<td>PhD in business administration</td>
<td>Associated Professor, Faculty of Tourism Management (marketing orientation) at University of Tehran</td>
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<td>P5</td>
<td>PhD in urban planning</td>
<td>Assistant Professor, Faculty of Urban Affairs at University of Tehran</td>
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<td>P6</td>
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<td>P7</td>
<td>PhD in political geography</td>
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<td>P8</td>
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<td>Assistant Professor, Faculty of Tourism Management at Science and Culture University</td>
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<td>PhD in tourism management</td>
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Book review

Edited by Stephen L. Wearing, Stephen Schweinsberg and John Tower
Channel View
Bristol
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case studies, tables and figures, references, index
Review DOI
10.1108/JTF-11-2016-0043

Positing that park managers, environmentalists, and others often dismiss nature-based tourism as being yet another example of unrestrained travel-based capitalism, the authors aim their text at testing this proposition and asking two controversial questions in relation to the marketing of national parks:

Should marketing continue to be seen […] as the quintessential exhibit of a neoliberal based industry standing in direct opposition to environmental preservation? Or is it perhaps not better seen as tool that can be used by park managers to advance their dominant environmental preservation agenda? (p. 2).

Based on Drucker’s (1958) notion that marketing represents the process through which economy is integrated into the society to serve human needs, the authors (p. 1) put forward Kotler’s (2011) view that:

The marketing of tourism in sensitive environments […] is not a zero sum game. Neoliberalist based strategic marketing decisions do inevitably have a range of social, cultural, experiential and ecological consequents for the environment in which they seek to operate.

The argument is that by adopting an ecological marketing approach targeting environmentally conscious consumers, a form of sustainable marketing – which accepts the limits of market orientation and acknowledges the necessity of regulatory alternatives to market mechanisms in order to foster corporate and collective commitment to sustainable development – can be used to develop tourism in national parks which follows the tenets of sustainable development: the protection of environmental integrity through responsible, realistic, relationships based on research in a regional context (p. 12). Such an approach requires the adoption of “A marketing strategy [which] represents an internally integrated but externally focussed set of choices about how the firm [i.e. park managers] addresses its customers in the context of a competitive environment” (Clegg et al., 2011, p. 150).

The goal is the recognition that “Sustainable tourism […] is not just about the preservation of an industry’s position in an economically competitive travel market place; it is about the role that tourism has to protect the sociocultural and physical environment in which it is situated from unsustainable development” (p. 4).

The book has six chapters. The first, “An environmental context for sustainable national park marketing,” presents a critical reflection of sustainable national park-based tourism marketing, strategy, and marketing (as practice) and tourism, principles of marketing and its application in national parks, and a model for national park marketing. In the second chapter, “Mainstream to alternative tourism marketing,” sustainable marketing and the tree model of marketing delivery are introduced in order lay the ground for complementary approaches to marketing and a summary of marketing strategies.

The third chapter, “Sustainable tourism marketing – a wicked policy challenge for park managers,” uses the notion that “many policy problems cannot be described in positivist, measurable scientific terms. Instead, because of their social construction they possess a range of intractable characteristics that characterise them as ‘wicked’” (p. 54) to understand the dynamic and wicked business environment involving tourism and national parks. The following chapter, “Approaches to marketing ephemeral tourist experiences,” focuses on marketing a national park visitor experience, visitor perceptions of parks, and visitor interpretations of wilderness, marketing.
authenticity, interpretation, and peak and consumer experiences of nature on national park trails. The fifth chapter, “The multifaceted rural, power and the marketing of culture through interpretation,” deals with the cultural legitimacy of interpretation in a multifaceted rural setting. Halfacree’s threefold model of rural place, Frisvoll’s power extension, and cultural legitimacy of the interpretive message. The book concludes with “Tragedy of the commons or solution for the commons,” a discussion of whether marketing of national parks for sustainable tourism is the problem or the solution.

The book is an important addition to the literature on national park planning and management, particularly because it presents to both the academic and the professional a new conception of marketing national parks, one which is based on such concepts as sustainable marketing, power relationships, cultural legitimacy, and demarketing in order support the goals of both tourism and national parks within a context of visitors, communities, and parks. This argument is succinctly brought together in the concluding chapter in which the authors argue that, while the nexus between tourism and national parks is a wicked problem and that wicked problems by their very nature cannot be solved, wicked problems can be tamed. Such an effort aimed at taming this problem requires the implementation of four principles (Clegg et al., 2011, pp. 24-5): stakeholder involvement, strategic planning, a focus on action, and the adoption of a forward orientation that scans the environment for weak signals that might indicate possible better futures. Such an approach requires that an equal voice be given to both park managers and tourism developers in collaboration with communities and visitors. If that takes place, the authors conclude that “the development of tourism in parks does not have to be perceived as at odds to the development of a sustainable park ecosystem. Instead, if they are framed correctly, tourism will be a vehicle for national park sustainable development” (p. 129). It is recognized, however, that the specific circumstances of each park will vary and that there is no single model of sustainable marketing that fits all parks.

The book has important lessons for those concerned with managing tourism in national parks in both developed and developing countries in the immediate and long-term future, given current levels of visitation and the likelihood of growing interest in national parks and resulting increases in pressure on critical and sensitive natural environments and cultures. That pressure will come not only from traditional demands and uses, but also from innovative and even unforeseen demands and uses. For example, national park managers must face the apparent explosion in social media and their possible impacts, such as calls for the provision of internet capabilities in previously remote areas. This will include demands for internet access in campgrounds for communications, on trails for interpretive information, and GPS and mapping functions for those wishing to access areas which have largely been out of the range of capability of use for many users, such as back-country hiking and wilderness exploration. All of these forces will affect policy, marketing, and planning of national parks.

The book is extremely well-written, extensively referenced in terms of both theory and practice, and provocative. The case studies present interesting examples of attempts at successful marketing sustainable tourism in a variety of national parks and highlight some of the real-world shortcomings and pitfalls of a relatively novel and innovative approach to reconciling the seemingly oppositional forces involved in attempting to bring together the goals of both national parks and tourism. As such, the book would be a useful addition to the library of academics, students, and professionals involved interested in national parks and tourism.

Paul Frank Wilkinson
Paul Frank Wilkinson is a University Professor Emeritus and Professor Emeritus at the Faculty of Environmental Studies, York University, Toronto, Canada.

References
What a great little book! This book is a must-read for any researcher, policy maker and eligible voter. “Voter?” you question. “Absolutely”, I answer, and given our focus on the future, soon to be eligible voters as well. Indeed, those future voters might still be more attuned to the gripping narrative through which Oskam builds his story in the introduction. A browse through the table of contents reveals a well-structured, flowing set of 14 chapters (I am deliberately counting the Introduction as one), with meaningful headings that highlight the storyline. The early chapters serve to establish a solid foundation by critically engaging with key terms, concepts and the evolution of their use in both the academic and practice discourses. The middle parts of the book then let the data speak – and by data we are talking the data that actually matter, or at least should matter, particularly to policy makers. The latter third of the book then delves into four future scenarios, making this book a great fit with Channel View Publication’s Future of Tourism series under which it is published. It does so in an applied sense, using four capital cities as examples. This allows for inherent variances in socio-political systems which is highly relevant given the entangled nature of the “sharing” phenomenon.

The “sharing economy” and specifically Airbnb story has many elements of a great story which this book pertinently highlights: there are secrets, covert petitioning, overt celebrations, offers too good to refuse, entrapment, surprises and twists and turns that will continue to evolve, influenced by powers visible and invisible and protagonists that may just turn out to be mere sideline players. The scary part is that this story is our current reality. Thus, this book is timely. On one hand it will be superseded quickly in an exponentially growing discourse. On the other hand it will continue to provide a solid snapshot of current thinking and practice, as well as an opportunity for future reflection on where things have actually moved in comparison to the scenarios presented.

The book highlights significant weaknesses in the literature to date while at the same time documenting a maturing of the academic discourse. A rapid shift through Jafari’s (1990) platforms of tourism thought are illustrated, with this book representing elements of both the knowledge- and the ethics-based platforms (Jafari, 1990; Macbeth, 2005). With regards to practice, the book provides a sobering wake-up call for policy makers, highlighting how the tentacles of big business by the winning few are wielding power and control. It is also details a repeat of the current social phenomenon documented in places like the USA and Australia in which the people who get hurt most by the actions, are the ones supporting them.

The book offers an important and thorough critical engagement with the topic which is still rare in the rapidly growing academic literature on the subject. Oskam’s methodical approach of working through definitions and current understanding of each pertinent concept is to be commended and is the foundation to his line of argument. He supports it with relevant data from multiple sources to build a triangulated perspective, without minimising the limitations of currently available data sources. One by one, prevalent myths are busted. Examples include that the “sharing economy” (as embodied by Airbnb) is about more efficient use of underutilised assets, or that it seeks to achieve greater efficiency through a reduction of consumption’ (p. 7); the elaboration on a compromised notion of community benefit and public interest (p. 18); or that host and guests in the Airbnb context are peers (p. 52).
If I had to nominate an area that warrants further attention in the book, I would suggest it could be the role of the media in perpetuating these myths and a dedicated section on power and politics, though many examples of the latter are woven into the narrative.

Oskam exposes the dissonance between Airbnb’s rhetoric and elaborately groomed profile, and the actively hidden winner-takes-all reality of Airbnb’s practices and impacts. The data-backed exploration of listing types, increasing professionalisation and multilisters paint a picture of social inequality and incentives to circumvent regulations (e.g. pp. 66, 94 and 107). As illustrated through the generous use of relevant examples, a pragmatic view is interwoven in the discourse, highlighting that the continuous evolution may well involve counter-disruption without necessarily suppressing the innovation and benefits arising therefrom (p. 28).

Whether you are an academic who is overworked and overcommitted, a future voter who prefers a fiction novel, an Airbnb host who is proud to contribute to the sharing of resources, a policy maker who just wants concise insights into key issues, or a local city councillor striving to improve the lives of your constituents and local community – head on down to the library now to pick up your shared copy of this book or conveniently access the e-version. The paperback’s spine is only 1 cm thick, its chapters are short and snappy, its story is engaging, its argument is strong and well resourced. “Still too much to read”, you say? Do not worry. Just read the introduction and the chapter summaries (and let them draw you in).

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References

The book *Food Tourism in Asia* provides an insight into the geographies, cultures, policies and economies that are bound together by food in Asian countries. Through its different chapters, the book highlights that the homogeneity of what is defined as Asian is achieved through the heterogeneity of cultures and assembled food identities. The book is a timely contribution to the tourism literature for two reasons. First, the book adds to the discourse on Asian tourism which is a step towards decentring “Anglo-centric” perspectives in tourism (Winter, 2009). Second, the book expands understandings of food tourism by discussing “food for tourism” and “tourism for food” which identifies the role of food in generating as well as facilitating tourism marketing practices (Andersson and Mossberg, 2017; Boniface, 2017; Yeoman and McMahon-Beatte, 2016). The book is divided into 13 chapters where each chapter discusses different food tourism phenomena with reference to either culture, policy or experience.

The book starts with the first chapter by the editors, which provides a contextual background by defining meanings and interconnections between food, tourism and Asian “otherness”. Chapters two, three, five and ten discuss the intertwined inseparability between culture, identity and food that attracts tourists. Chapters four, six, seven, eight and nine discuss food policy in the context of regional and local development. Chapters 5, 11 and 12 delve into the embodied experiences and learnt competencies of food tourism as lived and conceived by engaged and prospective tourists. The conclusion chapter follows the cognitive mapping approach to highlight six future areas of research to understand Asian food tourism.

Though each chapter is novel in terms of the issues it raises and insights it provides, several key chapters in the book stand out by pointing towards the economic realities of Asian countries which provide a non-western perspective of food tourism. Chapter four critiques the worldwide popularity of street food by pointing out its linkages with the urban poor and informal market exchange in Singapore and Ho Chi Minh City. Chapter seven discusses the case of Tatebayashi Grand Prix festival in Japan where local businesses demonstrate leadership using scarce resources to rejuvenate an economically disadvantaged region. Chapter eight highlights the historical growth of Ikeban (railway lunch) into the world-famous fast food Japanese cuisine. The chapter points towards the modest beginnings of Ikeban demonstrating the use of frugality by Japanese to achieve a fast paced modest life.

Though the book succeeds in presenting food tourism cultures in South-East Asian countries, it misses out on representing West Asian perspectives. Countries such as China, Pakistan, Nepal, Bhutan, Bangladesh, Sri Lanka and other Arabic countries that form part of Asia also need to be explored to get a holistic understanding of food tourism in Asia (Winter, 2009). Additionally, Asian food tourism narratives are also constructed by the affect of taste (Warde, 1997). Be it the palate of spices of India, the aromas of Persian Biryani or the staged view of Japanese Teppenyaki, the taste is deeply embedded in local cooking and eating practices and narratives of taste are often used in destination branding campaigns to ignite tourist interest (Boyne et al., 2002). An affective exploration of tourism related to Asian food cooking, staging and eating practices would also enrich understanding of Asian food tourists.

The central message of the book is that there is a need to identify Asian food tourism as an...
everyday, ongoing practice for Asian domestic and international tourists. The book enriches the understanding of food tourism as a symbol of conspicuousness that is sought, as well as an experience that is encountered and embodied in everyday life of a tourist in Asia. This multi-dimensional perspective of Asian food tourism as propagated by the book is useful for destination marketers and policymakers to be able to support and promote Asian destinations. Additionally, the book provides a practical understanding of issues, policies and marketing campaigns which is helpful for tourism academics, destination marketers as well as tourism businesses and stakeholders.

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References
The future society will be (digitally) connected and (physically) disconnected. Artificial intelligence and robotic knowledge are on the rise and mobile technologies dictate consumers’ daily lives, yet, consumers increasingly seek interpersonal relationships and meaningful connections. Travelling facilitates and reinforces these desired personal interactions. Service encounters go beyond delivering standardized services; they enable connectedness and evoke emotional reactions. Thus, emotional intelligence has become an invaluable asset and competitive advantage for businesses in the service industry. While tourism and hospitality curricula still focus on the acquisition of hard skills and standard operation procedures, employees are looking for “work-ready plus” graduates that have obtained much needed soft skills, such as emotional intelligence. Education and training need to be transformed to acknowledge the future relevance of emotional intelligence in successful service delivery and ensure that future tourism and hospitality employees obtain the desired skills. The recently published book Emotional Intelligence in Tourism and Hospitality by Erdogan Koc discusses this needed paradigm shift in tourism and hospitality education and training and therewith addresses tourism scholars, teachers, students and practitioners alike.

In 10 chapters written by 11 international authors, the book discourses the need and rationale for emotional labour, comprehensively describes emotional intelligence and elaborates on its advantages as a competitive strength. Questions and activities are provided throughout the book that can be integrated in education and training and invite the reader to actively engage in self-tests and reflective thinking. After introducing the topic and demarcating emotional intelligence from other forms of intelligence in Chapter 1, the concept of emotions and ways to develop and improve emotional intelligence are presented in Chapter 2. Performance-based tests and self-reported tests as tools to measure emotional intelligence are described in Chapter 3. The relationship between emotional intelligence and satisfactory service encounters is established in Chapter 4 with special attention to empathy and emotional intelligent behavioural competences in decision-making. With references to the dynamically changing tourism and hospitality environment, and particularly workforce, Chapter 5 highlights the role of cognitive knowledge, personality and learning styles in the development of personal expertise. The importance of social skills, especially emotional skills, for employees to become inspirational and successful leaders is further discussed in Chapter 6. Here the author refers to the influence of personality, gender, age and culture on developing emotional intelligence. The centrality of intercultural sensitivity is highlighted in Chapter 7 and seven key stages in advancing intercultural sensitivity from denial to integration are introduced. The ideas presented in this chapter are particularly important in the design of future tourism and hospitality curricula. Not only are tourists and the tourism and hospitality workforce increasingly multicultural leading to a growing importance of cultural intelligence, the recent rise of ethnocentrism stresses the need for intercultural sensitivity. Chapter 8 discusses the role of emotional intelligence in delivering service quality and assesses how the key elements of SERVQUAL can be applied to emotional labour. Hereafter, the lens is turned towards the dyadic relationship and interplay between customer and employee emotional intelligence in service failure and recovery. Considering that tourists are increasingly experienced, have higher expectation towards service quality and are becoming...
more emotionally intelligent, the authors of Chapter 9 argue that higher levels of employee emotional intelligence will be needed in the future to facilitate deep acting and affective service delivery. The last chapter goes beyond emotional intelligence and introduces spiritual intelligence as the most valuable skill for employees to become indispensable in the future. The author argues that “a lack of spiritual touch […] cannot create genuine satisfaction either for employees nor for their customers” (p. 145) and therewith provokes the reader to delve into the acquisition of spiritual intelligence as a deeper, more intuitive and less staged form of connectedness.

Only if the future tourism and hospitality employee manages to obtain higher degrees of self-awareness, self-management/-regulation, empathy and social skills will a replacement through robots remain an unrealised imagination. While robots might be able to acquire hard skills, they lack human’s emotional intelligence and fail to establish personal connections. This much-needed book provides a helpful starting point for anyone in the industry to understand the rationale and the characteristics of emotional intelligence. It raises awareness what future graduates and employees will need to consider when developing their skill sets and wanting to enter the tourism and hospitality industry to become successful leaders. Considering that students are a main target group for this edited book, I would have liked to see more consistency in introducing the key concepts of emotional intelligence. By nature, edited works are associated with the potential of using different definitions and perspectives, yet in some parts the reader is left alone with unsatisfactorily integrated tables, non-compliant descriptions using different original sources and insufficient explanations. A refreshing strength of the book is the incorporation of activities that invite the reader to self-test and reflect and thus actively engage with the topic. At the same time, it seems that the complex process of acquiring emotional intelligence is in parts trivialised. I hope to see more critical approaches and evaluations on the highly subjective and multifaceted process of becoming emotionally intelligent and, how businesses can succeed in not only facilitating the training of emotional labour but also retaining them in the long-term. Futurologists might argue that the book misses to acknowledge the influential role of technological developments and particularly artificial intelligence on the growing need for emotional intelligence – a potential for a second edition of this highly relevant and mostly enjoyable read.

Sabrina Seeler
Sabrina Seeler is based at the Business School, Nord Universitetet, Bodo, Norway.
Reputation and Image Recovery for the Tourism Industry is a book dealing with the complexity of place branding and strategies for managing the reputation and image of places in the event of shocks. Brand and reputation are relevant assets for tourism destinations and play a crucial role in the destination long-term development. Protecting this asset in times of crisis is a strategic competence of public and private organisations in tourism.

One of the most appreciable aspects of the book is its practical approach to a very complex subject. Place branding is a domain where the complexity of destination image and branding merges with the complexity of places. As the book highlights, places are filled with the meanings made by all representations created by a variety of stakeholders, from residents, to visitors, tourism and non-tourism industries, institutions, to mention the most frequent categories. Not only different stakeholders are engaged in constructing place elements, but such narratives evolve over time, adding layers of complexity to brand and image management over time. This book provides a streamlined approach to the analysis of reputation and image recovery strategies that helps focussing on macro-level factors and drawing general conclusions and recommendations.

The book consists of four sections, structured as follows:

1. Theoretical foundations – this first section is meant to provide the theoretical background relevant to the cases presented in the remainder of the book. This introductory section helps readers positioning cases within the relevant theoretical framework. The first chapter of this section deals with consumer behaviour psychology, with a focus on crisis situations. The second chapter deals with the influence media can have on tourists’ perceptions of destinations, followed by the role of marketing and branding strategies in changing such perceptions during the recovery phase. This chapter provides an opportunity to discuss the relationship between resilience and reputation, a largely overlooked aspect in this field. The third and last chapter focuses on image recovery in the accommodation sector.

2. Natural disasters – the second section of the book deals with tourism destinations’ vulnerability to natural disasters. Case examples cover extreme events like earthquakes (Kaikoura, New Zealand and Japan) and hurricanes (Haiti). Cases dealing with such critical events highlight the essential role cooperation with media plays for effective crisis management and image recovery after unexpected events. A distinction between communication actions delivering information (on the event and its impact) and managing reputation recover (through post-event storytelling) is herein drawn and addressed.

3. Man-made disasters – as devastating and sometimes as swift as natural disasters, man-made disasters are another type of crisis impacting heavily on destinations’ brand and reputation. Contributions in this section cover different types of man-made disasters, such as terrorism, waste management and large sport events. Empirical cases presented in this section use a vulnerability-resilience framework to isolate determinants of destination resilience. Factors identified as pivotal to build destinations’ resilience are external factors, such as political stability or overall state governance, as well as sector-related factors, such as cooperation among stakeholders,
communication and measurement or monitoring tools. The complexity of reconciling the industrial and tourism vocation of places is also dealt with in this chapter.

4. Organisational crises – this section examines the reputation of private and public tourism organisations in the event of a crisis and the role of media in the recovery process. Contributions to this section cover the whole crisis management cycle. Chapter 10 deals with pre-crisis strategic approach and preparation, as the adoption of crisis communication plans. Chapter 11 focuses on success factors during the crisis and identifies proactivity as the enabling factor for effective crisis communication. Chapter 12 focuses on post-crisis investigations as source of media stories that can rebuild reputation. This last chapter also highlights the importance of maintaining a crisis management culture outside a critical period.

Overall, this book offers a practical overview of those toolkits available to destinations to recover their image after a critical event. Starting with an illustration of the tools needed to understand consumer psychology, each chapter adds concrete examples on how to use media, communication, marketing and branding activities to improve place reputation, build resilience and react to crises. Cases also shed light on which factors enable and facilitate the recovery process. The collection of industry case examples proves an effective way to deal with a complex theme. Selected cases offer the reader a 360° view of critical situations impacting on destinations’ reputation and image. All empirical cases are structured into two parts, one providing contextual information about a specific critical event, including links with the relevant theoretical framework, and a closing chapter with learning points and recommendations.

It is important to highlight that real-life cases are presented in a stylised way and provide a simplified view of strategies developed to deal with complex situations. In this view, this book is certainly a recommended reading for students and practitioners who need an entry-level book on place branding and image recovery. Those with prior experience with the topic might not find in this publication the depth of information sought to gain new insights or a guide to develop full crisis-management strategies. Effective place branding requires a synchronised approach that meaningfully combines representations, interests and individual perceptions across stakeholders. Such an approach is rarely seen, or even possible, in practice. Recommendations presented in the book at times overlook the complexity of implementing relevant changes, such as changes in governance or stakeholders’ alignment, in practice.

Bearing in mind the aim and scope of the Journal of Tourism Futures, it is regrettable that the book does not address the single crisis with long lasting impact on tourism reputation worldwide, which is Climate Change. As concerns about the environment rise, the tourism sector is increasingly put under societal pressure to deliver alternative, more sustainable growth patterns. In such a transition phase, mature destinations start developing new visions for tourism development to address tourism environmental impact and so-called “overtourism”, a phenomenon occurring at destinations where locals and visitors feel the quality of life and visits have deteriorated due to large tourism volumes. Chapter 8 can be considered as an exception, as it investigates environmental problems and their impact on destination image and reputation. The focus of the chapter on individual destinations yet does not fully address the complexity of such a transformation.

Future research and publications in the area of tourism reputation and image recovery are invited to address this large-scale issue and the profound transformation this is triggering for tourism marketing organisations.

Valeria Croce
Valeria Croce is based at the Tourism and Service Management, MODUL University Vienna, Vienna, Austria.
This is an important book. It focuses on innovation in the tourism industry from the perspective of sustainability, surely a critical area of examination and discussion for the industry and its future. Its collection of 16 insightful and relevant chapters touch upon a wide range of issues which have been assembled into three sections: tourism futures and the technological facets of innovation, cultural paradigms and innovation, and tourism governance innovation. Within the sections, readers will find chapters addressing the full gamut of sustainability topics including but not limited to: natural resources; the impact of digital technology including connectivity and the internet economy; ethical considerations related to sustainable tourism; innovation impacting pricing, distribution and product development; cultural impacts on tourism sustainability such as “Disneyfication”; and last but certainly not least, the challenges faced by planners, public policy makers and academics with assessment and measurement in the sustainable tourism future. Much of this discussion is linked to appropriate examples in the real world and draws from the successes and failures of approaches taken by destinations, agencies and private sector operators to resolve problems and develop a sustainable future.

The relative strength of an edited book flows in part from the skills of its editors, both intellectually and administratively. This book benefits enormously from the leadership of its editors, Eduardo Fayos-Solà and Chris Cooper. Representing both the public policy sector and academia, Eduardo and Chris are acknowledged leaders in the tourism field and as such, have been able to attract the impressive author pool discussed below. In addition, they have crafted a well formatted book that easily leads the reader through the key areas of discussion logically. Perhaps most importantly, they have been able to set the stage for the discussion in Chapter 1 including a discussion of the need for innovation and collaboration between the public and private sector in order to advance sustainability of the industry. The chapter also provides a useful road map of the book itself which assists the reader in utilizing what is a fairly substantial tome. In Chapter 18, the editors pull together much of the discussion to reach a number of relevant conclusions, most of which are optimistic. They conclude with useful summaries of the key elements of chapters making up the three sections of the book. These final pages, seven pages, are extremely useful and underscore the quality of the book and its leadership.

The other relative strength of any edited book lies to a large degree with the quality of its author pool. The author pool for this book is an impressive multisectoral group consisting of 32 policy experts, industry leaders and appropriately, a significant number of internationally respected academics. The group is also highly international and multicultural, both characteristics that contribute strongly to the quality of the discussion and the value of recommendations found within the book. As a result, the discussion found in the book is relevant, far-ranging, and engaging and taken as a whole, is a “must read” for anyone interested in the future of tourism. It should be noted that the quality of the author pool also comes from the heterogeneity of the group. With apologies to those not mentioned, it includes a number of highly respected and long-standing leaders in the tourism research field including Jafar Jafari, Don Hawkins, Alan Fyall, Noel Scott and Larry Yu, to name a few. It also includes highly respected public and private sector leaders including Francois Bedard, Cláudia Lisboa, Cipriano Marin and Zoritsa Urosevic. Again, apologies to those not mentioned. Overall, this is an extremely impressive group of authors.

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The future perspective of the book according to the editors is a 10–20 year time horizon. The editors quite correctly point out that focusing on the future of tourism is to quote them, “[...] territory where few authors have dared to tread” (p. 325). They make the point that the future is subject to the influence of so many known and indeed, not yet known, variables that a more appropriate way to refer to this discussion is “tourism futures” which recognizes this level of uncertainty.

Nonetheless, this book does a good job of examining tourism sustainability and innovation within this environment of uncertainty to the extent that this book is, as mentioned above, a “must read” for those interested in tourism futures.

Michael Conlin

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Overtourism, defined by the Collins Dictionary as: “The phenomenon of a popular destination or sight becoming overrun with tourists in an unsustainable way” (www.collinsdictionary.com/submission/19794/Overtourism) is not a new phenomenon, but only started to get traction (media and public opinion’s attention) over summer 2017 (Séraphin et al., 2018). Overtourism: excess, discontents and measures in travel and tourism provides a comprehensive overview of overtourism as a phenomenon. Its focus is on the roots of overtourism, and its consequences. To do so, a variety of destinations across the world have been selected. What fleshes out from research on overtourism is the Janus-faced character of the tourism industry (Sanchez and Adams, 2008).

The design of the book makes it suitable for students (tourism, geography, history, etc.), and also for practitioners across the industry. One of the best features of overtourism: excess, discontents and measures in travel and tourism provides the illustrations through international case studies, such as Venice, Majorca, Galapagos, Kyoto, Iceland, Costa Rica, Amsterdam, Africa, Brazil, Portugal and Australia. This book is also a “one-stop-shop”, as it is one of the only two currently existing books (the other one being Overtourism: Issues, Realities and Solutions, by Dodds and Butler (Eds), 2019) on overtourism, that can bring scholars, students and practitioners alike up to speed with accessible, and easy to understand, overview of recent research on overtourism. The only limitations of this book are the “In focus” sections. I found them particularly distractive. Additionally, they do not add any particular insight into the investigated topic.

Chapter 1, 4 and 6, could be entitled: Background to overtourism. Taking Venice as an example, chapter 1, not only provides a definition of overtourism, namely: “An occurrence of far too many visitors for a particular destination to absorb over a given period” (Visentin and Bertocchi, 2019, p. 20), but also a list of warning signs that destinations have reached or about to reach the tipping point of overtourism (depopulation of the city; increase in tourist demand; and increase of offerings to tourists). As for chapter 4 and 6, they offer a didactic, even pedagogical approach of overtourism that can bring anyone interested in this phenomenon up to speed.

Chapter 2, 5, 8 and 9, are mainly discussing the consequences of overtourism. Gentrification; the development of short-term accommodation; water shortage; and the impacts on young residents have been the key focus areas.

Chapter 3, 7 and 10 are shedding light on the fact that overtourism as a phenomenon can happen anywhere in the world, such as wild and protected areas (such as the Galapagos); places you would not think tourists would go because marginal and dangerous (such as Brazilian Favelas); and because they are remote (such as Greenland). For Ioannides (2019), it is naïve to think that some destinations are lying well beyond the reach of international tourism. The intensification of recent touristification processes being one of the main reasons of this phenomenon (Da Cunha, 2019).

This book is of importance because we did not know, and still do not know enough about how and why overtourism symptoms are occurring and what can be done about them. On that basis, the editors are suggesting that empirical research on the impacts of overtourism with a focus on indices related to governance; environment; social capital; planning; cultural heritage; and local
communities should be carried out. Equally important, they are encouraging a holistic approach of the tourism system and the involvement of all stakeholders in future research.

**Hugues Seraphin**

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**References**


Today, robots have multiple uses: agriculture (horticulture needs, such as harvesting and picking, weeding, spraying pesticide and monitoring the growth of plants); medicine and surgery (surgical robots, rehabilitation robots); assisted living (robots designed for use in healthcare and elder care settings); education (robotic toys); assembly line robots (car production, electronics); security and crime fighting; duct cleaning; investigating hazardous environments; underwater and space exploration.

Robots are also surfacing in hospitality and tourism. One of the most challenging technological developments within the travel industry in recent years has been the increasing presence of robots: robot receptionists, room service and concierge (automated guided vehicles to carry out delivery services, from drinks to towels, in hotel rooms); robot assistant for airports and hotels; mobile robots designed to educate and entertain people in public places (such as museum tour guide robots entertainment; crowd attractions); security robots for airports; robot for travel agencies; chatbots for flight or hotel bookings; robotic floor cleaners.

Humans are still reluctant to trust robots and artificial intelligence. If, on the one hand, automation is often treated as a global opportunity, on the other hand anxiety and suspicion worldwide have been growing in recent years due to the growing trend in automation and the advent of AI technology. Some people would think that the rise of machines era might be threatening various jobs: one common fear people have is that robots will take over many of the jobs that humans perform and leave many unemployed. Another common fear is about machines performing many of the tasks done by humans and taking control of human lives. Other people would wonder if replacing human beings with robots, would kill service quality and personalization, especially in activities and jobs that require human interaction. Using robots, especially in the realm of healthcare and medicine comes with obvious ethical questions: for example, people can be afraid of robots taking over children or elderly care. However, robots can be handy when they are tasked with basic activities, such as identifying objects, picking them up, transporting them; performing repetitive assembly tasks or completing dangerous tasks that may pose a threat to humans, helping with household chores; greeting guests, helping them with their bags, and guiding them to their rooms.

Research shows that not every person is equally afraid of the new technology. With the generational turnover, the trust in robots and AI seems to be growing. The younger generations (Millennials, Gen Z and Gen Alpha) like experimenting with robots. Millennials are, in general, most likely to choose hotels with robotic service. Millennial parents also have more trust in AI for diagnosing and treating their children than the previous generations. Due to the fact that Millennials are more acquainted with new technology, it will be easy for family hotels to start using robots.

The concise and interesting book by Maria Chiara Carrozza helps us increase our trust in robots. The book is clearly written, accessible and informative. It is 66 pages long, organized into five chapters, including a preface and a conclusion: Are We Going Through a Real Revolution?: On the Way to Robotics; The Socialization of Robotics; Our Friend the Robot; The Robot Inside Us. The book is based on a series of lessons held by the author at the School of Politics in Rome in 2016 and is intended for an educated, though not-specialist, audience. The book offers a fascinating journey through robotics in its way.
toward its evolution from industrial to social applications. The book specifically focuses on the interaction between humans and robots, and on the social aspects of the integration of robots with humans in their everyday life. By doing this, the book fosters a discussion on the ethical considerations of human-robot relationships and discusses whether these bonds between humans and robots could contribute to a better life. The book addresses several issues related to human-robot interaction: from safety, to security, to sentience and adaptability, to legal and ethical issues. As stated in the book, there is a need to ensure that the interaction between the robot and the human takes place safely and without damage or injury. Another key issue discussed by the book is the sustainability of the production of robots and the materials they are made of, in terms of developing a circular economy. A third, crucial need is to prepare children and young people to face the challenge posed by the increasing presence of socially-interactive robots in everyday environments. As the author writes, robots are gradually leaving the factories and entering hospitals, schools, streets (self-driving cars), the field of entertainment, leisure and hobby and, finally, our homes: domotic infrastructure, home robotic chefs, cleaning robots. Robotics is becoming “social.” This revolution brings along with it both challenges, benefits and opportunities. As regards tourism, one advantage is the ability for robots in the hospitality industry to offer support (such as information for tourists about local hotels, shops and restaurants) using a variety of different languages. An autonomous car—also known as a robotic car or driverless car—is another positive example. It can pick up guests at the airport and, if they have not checked into the hotel, can check them in and set up their smartphone to use as a key. The car can also make suggestions regarding restaurants and shops and make reservations for the guests. One further example is robots to help disabled people and older adults travel safer, providing tailored assistance based on each user’s needs.

In short, the book discusses the need to shape the ethical, scientific, and social perspectives of robotics, and facilitates the design of responsible robotics and the successful introduction of robots into our society, while still maintaining human customer service. This is a book that helps us prepare for the robotic revolution in every domain of life, including tourism.

Elisabetta Ruspini

Elisabetta Ruspini is based at the Department of Sociology and Social Research, University of Milano-Bicocca, Milan, Italy.
This thought provoking book has 13 chapters, in the form of essays, written by 11 authors on the Future of Museums. The authors come from a range of backgrounds beyond art academics and thus provide an interesting range of views. Whilst the title may be ambiguous as to which kind of museums they are referring to, the book clearly states they are referring to museums of art. Nevertheless, the book will be of interest to all museum professionals and non-professionals alike. The book is easy to read and each chapter starts with an abstract providing an overview. As the title states, the future of (art) museums is discussed from a number of angles including their role in society, the use of technology, the mediarization of art, museum’s contribution to the knowledge economy, the changing nature of services provided and the changing nature of work in the museum. One author comments that he is more worried about the future than the future of museums.

Chapter 1 act gives a brief one-line overview of each chapter and introduces their author(s).

Chapter 2, Changing Societies, Changing Art, Changing Museums? Museums are part and product of society and thus cannot remain static whilst society around them changes. Whilst they may be treated by some as another attraction and are often viewed in terms of the economic role they play, their role as a cultural institution should remain at the forefront.

Will There Still Be a Future when the Museum of the Future Arrives? Forms the basic question for Chapter 3. Cultural tourism has become part of our attention/experience/distraction economy. As the majority of visitors to museums are not art professionals how will this change how museums present themselves and are evaluated? Museums have become part of the experience economy and become “highly corporatized” with guests raising greater complaints about service and museum restaurant food rather than the art. The future of museums will be a question of what society prioritises.

The following chapter; Museum services in the Era of Tourism, explores museums’ integral role in the cultural tourism economy and how museums compete in the expanding leisure market.

Chapter 5; “Manifesto for a New Museum” discusses the idea that museums should become “a laboratory for the citizens to explore new worlds”. With the growth of private museums vs public museums, the nature of what is considered a successful museum changes and there is danger that they will be viewed as entertainment places only. The future museum needs to go back to what it was: a placed of interdisciplinary research and networking.

Chapter 6 explores the changing nature of education and labour in museums. Are they only public storage facilities or “keepers of humanities’ dreams”? Certainly museums are in a process of transformation as they grapple with the role that digitisation can and will play in the future. This will transform how museums store, access, share and produce art in terms of the space required and type of human skills required.

Yoko Ono Collecting Piece II in Chapter 7 provides an intriguing and inspiring work of art produced in 1963.

Chapter 8, “Entering the Flow: Museum between Archive and Gesamtwerk” explores how the museum’s traditional role was to stop the flow of time and preserve objects. In doing so, museums lent hero status to objects included but created an inauthentic environment for those same objects. The internet and digitalisation of objects can...
create a space for art to be part of the flow of events.

Chapter 9 explores the growing impact of multi-media in how we interact with and consume museums. In “The Future of Media determines the Future of Museums”, the author enquires how museums have been forced to comply with technology and will continue to do so in the future. They caution that due to radical multi-media consumerism some art has in fact been lost to museum visitors of the future, as museums have been unable to preserve the technology platforms that supports the art.

In contrast, Chapter 10: “The Renewal of the Museum in the Digital Epoch” looks at the positive role that technology can play in museums. Technology has changed the way people communicate, socialise and interact with museums. Technology can have an enabling effect in reaching the vision of each exhibition and mission of the museum. It can personalise and democratise the exhibitions. But for this to be realised museums will need a thought through and cohesive digital strategy, with long term vision and a commitment of human and financial resources.

Chapter 11: “The Museum of the Future”, explores how the future of museums has been discussed historically. The author suggests that the future of museums lies in the “para-museum”. Para – the Greek prefix meaning side-by-side or “beyond” refers to the author’s belief that the future museum will simultaneously inhabit the contradictions that sit within the external community within which it finds itself.

2019 marks the 100th year the Bauhaus movement. “The Imaginary Bauhaus Museum”, Chapter 12, is in the form of an interview with the curator of this new museum.

The final chapter draws together themes from the book. In Chapter 13, “Conclusion: the Museum of the Future and the Future of Museums”, six common themes emerge and six thought provoking questions for the future of museums are proposed.

Yoko Ono Collecting Piece II (1963) provides food for future thought:

Break a contemporary museum into pieces with the means you have chosen. Collect the pieces and put it together with glue.

I can highly recommend this future orientated book for anyone involved in museums. In fact some chapters are relevant to professionals in the attractions industry generally; particularly to those that are involved in museum like learning institutions (aquariums, pop-up museums). The book was easy to read and very relevant to understanding the changing nature of our society and how this influences leisure demands.

Sabine Michaela Lehmann
Sabine Michaela Lehmann is based at Curiositas, Cape Town, South Africa.
The recent digital transformation phenomena and the new breed of workforce in the marketplace require organisations to change the style in which a business operates (Matzler et al., 2018). The intense competitions among businesses have literally forced organisations to implement change management by considering the full value chain, in tandem with the market change (Sony, 2018). An organisation that does not embrace or keep up with technology would remain uncompetitive even if its competitors stay status quo. Despite only four chapters, Friedrich’s book Managing Future Enterprise is focussed on the essence of “human” to create values for business viability in the future. The chapters are discussed within the themes of: challenges in modern management; values creation as value creation; and value adding networks.

Chapter 1 highlights the emergence of modern economic thinking concept, which many enterprises having difficulty to adopt and adapt. Profitability, scarcity, competition and growth form the common priorities in managing organisations. Profits are only possible when rewards gained are higher than the amount invested. Friedrich described Uber, a ride-hailing service provider, as an example of modern management implementation that is able to disrupt a very traditional industry – the taxi industry. While the taxi industry remains how it was for many years and reluctant to change, Uber has revolutionised the public transportation sector by creating values that customers appreciate. Organisations who overly engrossed in looking after its daily operations tend to ignore the fact that competition or other disruption may be creeping up on them. The book explains the situation by two common traps: human psychology; and economic focus on yield. The chapter concluded with a strong message where organisations must be constantly creating something that is niche (or of value), otherwise be prepared to be erased.

Chapter 2 defines “enterprise” as a group of people working together to achieve a common goal that otherwise cannot be achieved by an individual. The chapter discusses the success factors of an enterprise by creation of a high performance team. Instead of the traditional management focus on profitability, Friedrich brings in the “human” element into the formula of enterprise: H2O (Humans with Humans for Humans in Need of Organisation). In fact, the success equation further evolves to H2OsB (sB = substantive benefit proposition) and onwards H2OsB3. The social capital of a company (i.e. trust, loyalty and cooperation) is the main factor to cultivate loyalty and commitment amongst employees. The social capital elements are best to develop into three different levels: factual (fairness, dependability, appreciation, respect), social (responsibility, trust, commitment) and organisational (openness, consistency, transparency). Cultivating high performance teams can be done through the power of global ethic values. The significance of values becomes evident in an environment where companies are required to be more flexible and to enhance its uniqueness. Organisations with high performance teams tend to benefit from the positive effects that the teams produce. The chapter concurs by comparing new elements of old and new thinking to business success.

Chapter 3 discusses value creation towards future business viability. Friedrich suggested three key questions in nurturing viable business ideas: What is our true passion? Where can we be the best? What benefit are we creating? Additionally, business models and value proposition can be further refined by putting it through the values pyramid. There are two principal questions to address
in forming value creating networks: Who is the active contributor and who is outside of it? How and with which means can added value be created in such value creation networks to reinforce the entire network? Besides the new value(s), the organisations also require a new culture of leadership that enhances teamwork and empowerment. Friedrich offers the Values Driver Cockpit framework to end the chapter.

Overall the book provides interesting views on sustainable business through value-driven culture and viable business models that align with the current market needs and trends. As Friedrich summarised in Chapter 4, organisations are built on cooperative systems, where people are the driver to enterprise success. Businesses should not be managed solely for profits, but to create value propositions that are viable for its people to execute and for its customers to appreciate. The success formula to value creation and business viability highly relies on the process involves in making an impact on all levels of the system and the eco-system surrounding the enterprise. In the current disruptive business environment, it is important to have a business idea that is not just viable but purposeful for the customers.

Thus, it is essential for the management to be able to personify their business and connect it with the customers as if the business is a human (Wong, 2018).

**Kee Mun Wong**

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**References**


I wanted to review this book because of my training as a city planner and was interested in understanding the future directions for my profession. Although it only touched on this topic, it opened my mind as to the complex issues not only facing the city planners of today, but much more importantly, the very complex issues facing them and society in the future. The book is based on the insights of two urban planning consultants and was developed from three previous books (Future City, 2009; The Safe City, 2013; Digital Defence, 2015) and from their recent experiences of developing the smart city concept for Arlington, in the USA. As Arlington, is located just outside Washington DC, the book presents a picture of what can be achieved when a national government supports future proofing of urban planning activities. Given the continuing growth of the world’s population, and the resulting expansion of cities, the publication of this book is fortuitous.

The aim of the book is to “present a rough guide to what is meant by a smart city – today and tomorrow” and urges urban planners not to fall into the trap of “thinking that the way forward is throwing technology at ever demanding problems”. In 14 chapters this book explores the methods and tools used to create and develop a smart city, through an exploration of not only cybersecurity issues and the need for new intelligent infrastructures, but also the administrative, legal and regularity systems needed to both support the smart city, and to prevent the misuse of technology. It concludes with a very useful 30-page glossary of the terms and acronyms used in the book (from Adware to Zombie Computers). This glossary will prove very useful to the non-technical reader and could be used as a stand-alone document.

This book is not written in the usual tourism futures style, with grand ideas, speculative insights and extensive listing of academic references to support some vague conclusions, indeed there is no mention at all of tourism in the whole book. The authors are very clear on the practical issues facing smart cities, and caution against the adoption of quick technological solutions to complex social problems. The book is unusual in that author’s do not make extensive use of academic articles from learned journals to support their arguments, but instead draw from their wide-ranging knowledge of published reports by consultants, government and commercial research institutes, and from articles in respected newspapers, such as the Washington Post and the New York Times. Thereby, giving the book a feel that it has been developed from real world experiences of complex issues, rather than unsupported academic speculations.

Often with books written by more than author, the quality of individual chapters can vary and sometimes do not flow together to develop a well-argued and cohesive discussion, this could not be said of this book. Although it is written by two authors, it is clear that they have worked together in the past, as it is not possible to distinguish which author wrote which chapter.

As for criticisms of the book, they are relatively small. Exploring smart cities from a narrow technology and cyber security focus, rather incorporating a wider humanity and sustainability focus, suggests a somewhat conventional approach to the study of smart cities, which fails to reflect the wider debate on smart tourism. However, the book’s technology and cyber security focus, does reflect the author’s real-life experience of working closely with one city, which is home to a number of USA national security agencies. While the
authors did try to draw examples from other countries, as this book has a strong American focus, some of the conclusions may not be applicable to other countries. Also, repeating key messages a number of times throughout the book, such as: “the internet of things will develop into the internet of everything” or “suburban sprawl is bad, urban density is good, but super density is bad again” was annoying. However, by the end of the book I understood the important messages the authors were trying to make, and perhaps such repetitive actions did help to reinforce my understanding of their key messages.

The author’s mission statement for the book was to make the topic “interesting, informative, exciting, and perhaps even occasionally amusing”, and they achieved this goal. Although the chapters can be read by themselves, the reader would be doing a disservice if this is how they read the book. Like a good meal, where the all individual food items are excellent, it is the consumption of the whole that gives pleasure to the total experience. So, it is with this book, it is best read as a whole, so one can experience and understand the rationale for the key messages outlined in the book.

Finally, in terms of a recommendation to buy the book or not. This is not the usual tourism futures book familiar to readers of this journal, but the book will prove useful to readers who want to explore tourism futures from a wider and different perspective. While it would be difficult to describe the book as essential reading to better understand tourism futures, the insights it provides into the future of smart cities are thoughtful, interesting, challenging, worrying and frightful, and perhaps this is what all good books about futures should set out to achieve? As for the city planners of tomorrow, this book highlights the crucial role they will play in developing safer and workable cities.

In conclusion, this book should be of interest to a number of markets, from: general interested informed readers, urban planners, city politicians and central government decision makers. It should also be read by tourism futurists, for in the not too distant future, some 80 per cent of the world’s population will live in cities. Futurists will need to better understand not only the issues facing society in such cities, but the effects and counter effects of different policy actions in creating smart cities, and their subsequent impacts on tourists who visit such cities.

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