

# Strategic foresight for (coastal) urban tourism market complexity: The case of Bournemouth

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## Abstract

This paper discusses an approach to evaluate and analyse strategic planning in multi-functional complexities of coastal urban areas with conflicts regarding leisure space which restricts the diversity of tourism segments using an urban locale. The paper proposes a holistic and multi-faceted systems approach to analysing such multi-purpose use of urban spaces with a case study of Bournemouth where the needs of overseas language students and high spending tourists can present an interesting challenge to urban planners. The systems approach advocates integration and alliances in investment incentives to help identify alternative urban use strategies in tourism and leisure contexts which allows for rebranding of an urban area whilst extending the product offer.

**Keywords:** Urban tourism planning; Scenario planning; System modelling; Educational visitors

## 1. Introduction

Urban tourism is recognised as an important form of tourism to support local economic and cultural development of an urban landscape (Ashworth & Page, 2011; Smith, Macleod, & Robertson, 2010). Despite its significance, urban tourism remains imprecisely defined and vaguely demarcated with little development of a systematic structure of understanding (Ashworth & Page, 2011). This is partly due to its broad variety of tourism related activity within an urban environment (Edwards, Griffin, & Hayllar, 2008) which ranges from Visiting Friends and Relatives (VFR), attending cultural events and visitor attractions, going to the beach, shopping, experiencing nightlife and studying within a city environment and associated leisure activity. Subsequently there is a lack of recognition of possible relationships and interactions between tourism and the multi-faceted entity of the city. Cities and large towns, as the primary focus of urban tourism, are large multi-functional entities that can absorb many different types of tourists and as a result undergo many changes to respond to the associated demands of the market (Ashworth & Page, 2011; Law, 1994; 1996; Page & Hall, 2003). For example, urban tourism planners need to consider a variety of products and experiences for people with a wide range of motivations, preferences and cultural perspectives (Ashworth & Page, 2011) which in turn affects the management of complex relationships and interactions between varied expectations of types of tourists and residents. The aim of this research is to apply a multi-methodology approach to analyse the robustness of Bournemouth Borough Council's long-term market-based strategies for tourism development.

Managing urban tourism through strategic planning can contribute positively to the social and economic life of a destination by mitigating negative externalities, providing a coordinating mechanism to focus investments involving multiple actors over many years, and informing shared visions of futures (Chettiparamb & Thomas, 2012; Van der Berg & Russo, 2004). Coastal urban environments, such as the large resort town of Bournemouth, that own a maritime heritage, can also provide a cultural and historical interest for tourists if they no longer practice extensive maritime-based industries such as ship-building or fishing. This leads to tourist preferences for marinas and leisure facilities and other unique and authentic products such as heritage and cultural tourism compared to traditional sun, sand and sea (3Ss) tourist experiences (Agarwal, 2002; Gale,

2005; Sedmak & Mihalivc, 2008).

However, there is limited research that investigates tools and approaches to manage (coastal) urban tourism planning with a long-term perspective (for an exception see Maitland, 2006 and Formica & Kothari, 2008) or more specifically for coastal urban destinations. This paper presents a multi-methodological approach applying system dynamics (Sterman, 2000), scenario modelling (Walsh, 2005) to qualitative and quantitative data collection that supports strategic planning in an (coastal) urban tourism context. This unique approach helps to sustain the creative development of experiences and products whilst evaluating their impact on the destination and supporting and evaluating the vision defined by a tourism strategic planning board or Destination Management Organisation (DMO) of a (coastal) urban setting. Although this paper is set in a coastal urban context, its applicability transcends to many different tourism environments and contexts where complex impacts of tourism, that have inter-related characteristics and factors, need to be evaluated to provide a more sustainable and viable form of tourism.

### *1.1. Rationale for study*

Bournemouth was chosen as an urban setting with a population of 188,730 and as one of the 20 most visited towns in the UK (ONS, 2010; 2013) with 6.88 million tourists visiting Bournemouth from a total of 30 million visits to Dorset (National Coastal Tourism Academy NCTA, 2014). This represents a significant impact on local economic development where employment in tourism is approximately 14 per cent of the workforce (Dorset For You, 2014) compared to the United Kingdom (UK) national average of employment in tourism as 6.5% and direct revenues from tourism in Bournemouth accounts for approximately 11% of the tourism expenditure for the Southern Region (South West Tourism Alliance, 2009). The importance of robust tourism strategies for the future development of Bournemouth is evident when local tourism authorities are taking increased attention to: the geographical features, with 8 Blue Flag beaches in the Bournemouth and Poole area; over 200 restaurants and bars; maritime heritage; cultural and retail offerings to students, tourists and residents alike; and the establishment of an innovative tourism multi-stakeholder partnership called Bournemouth Tourism Management Board (BTMB). Bournemouth forms part of a selected group of coastal towns and cities in the UK, such as Brighton, Weymouth, Aberystwyth, St Andrews, Falmouth and Swansea, which have recognized the need to expand their cultural offering and promote art, music, museums, galleries and heritage sites as well as attracting a stable student population to compensate for the seasonality and unreliability of only 3S (sun, sand and sea) tourism strategies (Law, 1996; Mullins, 1994). The geographical location of such cities, where they are relatively remote from other major urban centres, provides an interesting dynamic for tourism development in addition to traditional sand, sea and sun tourist experiences. Education-based tourists, (Ritchie, 2003), who travel to a destination to participate in formal learning experiences, expand these traditional coastal elements. This includes the development of activity places, leisure settings and support services (Page, 1995) and the potential to provide educational facilities as part of the elements determining the dynamics of urban coastal tourism. This situation adds complexity to the management of interactions between diverse tourists segments and residents that has received limited academic analysis in urban tourism planning literature.

This paper assesses diverse scenarios within the context of two main strategic issues. Firstly, there are diverse tourist segments and expectations, including: students; day visitors and residents. Each segment has potentially conflicting interests in the use of the city where overcrowding and the well-known busy nightlife attracts one type of visitor but alienates other segments who search for more culturally-based experiences in visitor attractions, restaurants, cafes, art galleries and events. With a student population of approximately 18,000 at Bournemouth University (Dorset For You, 2014) and thirty English-language teaching colleges, (Language Course Directory, 2015) the cost and availability of appropriate accommodation provision for tourists and students alike are key issues which are considered in this study. Secondly, BTMB is taking diverse actions to achieve the “Bournemouth 2026” vision.

## 2. The complexities of coastal urban tourism

The coastal tourist city is not necessarily a distinct spatial entity that the visitor can easily recognise, but a collection of consumption experiences, dispersed in the city and coast and grouped into districts and zones (Jennings, 2004; Judd & Fainsten, 1999). Each geographical area, urban entertainment district (Hannigan, 1998) or cultural or creative quarters have their own icons and attractions that differentiate the place of consumption contributing to the patchwork of consumption experiences (Ashworth & Page, 2011; Ashworth, 2012). Thus, a (coastal) city is a series of inter-connected sub-systems that co-exist and offer diverse social and cultural forms to a range of different market segments. The coastal urban city is often seen as a gateway or hub for other regional tourism activities, drawing day trip visitors away from the city. Such diversification within tourism has led to a decline of the traditional seaside resort (Gale, 2005; Hall, 2001) and traditional coastal industries (Lacher, Oh, Jodice, & Norman, 2013) providing new opportunities for urban development (Cooper & Hall, 2008; Hall, 2001).

Ashworth and Page (2011) suggest that it is difficult to distinguish between tourists, non-tourists and resident uses of the city, particularly according to the time spent within the urban environment and the type of activity and purpose that one is engaged in. Notably Paskaleva-Shapira (2007) underlines how urban tourism should aim to be attractive to all types of visitors responding to the multi-functional approach to urban tourism which in turn can support competitiveness and a distinct city brand which promotes quality of life for tourists and residents. This re-iterates the basic principles of developing a sustainable competitive destination which is of equal interest to residents and tourists alike (Ritchie & Crouch, 2003). Coastal urban tourists are difficult to differentiate as there are visitors going to the city purely for shopping or night-life, whilst other tourists may visit for beach related leisure pursuits or business purposes (Ashworth & Page, 2011). It is therefore useful to take an industry-based segmentation approach in addition to tourist segmentation which can detect areas of conflict or strategic challenge. That is, the tourist and the local resident cannot usefully be distinguished purely in terms of motivation or behaviour (Ashworth & Page 2011; Law 1996; Mullins 1994). Instead the joint utilization of service provision of similar urban facilities, illustrated in Ashworth and Page's model in Fig. 1, such as shops, catering establishments, entertainment and cultural events leads to the need for better strategic spatial planning and innovative segmentation approaches. Fig. 1 illustrates the linkages between such services, diverse market segments and varying spatial definitions of urban spaces for tourism use.

However, Ashworth and Page (2011: 10) do not include students or educational visitors as a key market segment in their model despite thousands of students coming to learn a language or study for degrees in touristic cities providing a significant source of economic and cultural impact within a tourist destination (Van den Berg & Russo 2004). According to the UK Council for International Student Affairs, in the year 2013e2014, 388,250 international students came to the UK to study in higher education (UKCISA, 2015). In addition the UK attracted 50% of the global market for English Language Teaching (ELT) which contributed £2.5 billion to the economy in tuition fees and living costs (HM Government, 2013; Study Travel Magazine, 2012). Many of those learn English during the peak summer tourist season before they start their University degrees in autumn (Shen, 2005).

In urban coastal contexts the tourist experience is similar to general urban tourism products consumed relatively rapidly since the length of stay in urban tourism destinations are shorter, e.g. city breaks, compared with beach resorts (Richards & Wilson, 2006). Urban tourists spend more per head than longer staying visitors, e.g. students, mainly in the intensive use of entertainment facilities, e.g. restaurants, museum, which supports the multiplier effect of tourism (Ashworth & Page, 2011) but students spend more when rents and college fees are considered. NCTA (2013) reported a lack of self-catering accommodation within Bournemouth and a predominance of hotels, bed and breakfast accommodation. This links to various behavioural factors of urban tourists including pre-dominance of short stays and lack of repeat visits, presenting challenges for tourism authorities and local businesses to attract and encourage tourists to return (Law 1996; Mullins 1994). Additionally, it cannot be assumed that tourist use of an urban space by one segment does not impact other tourist segments over the long term. For example, educational tourists also use attractions, events and transportation services (Ritchie, 2003) which may cater for day visitors or beach

staying visitors. Thus, there is an important overlap between the types of visitors and tourists and how they impact the benefits and costs that can be spatially attributed and evaluated (Ashworth & Page, 2011).

Lacher et al. (2013) highlight the lack of understanding for consumer preference for coastal destination attributes and the need for on-going evaluation of current products and complimentary facilities and development of new products that service the varying needs of tourists. This underpins the importance of effective strategic planning and management of urban spaces. This can be achieved by the integration of urban tourism stakeholders through alliances and public-private sector partnerships to ensure urban developments and tourist activity supports a united tourism destination strategy and image that supports local economic development (Hall, 2008).

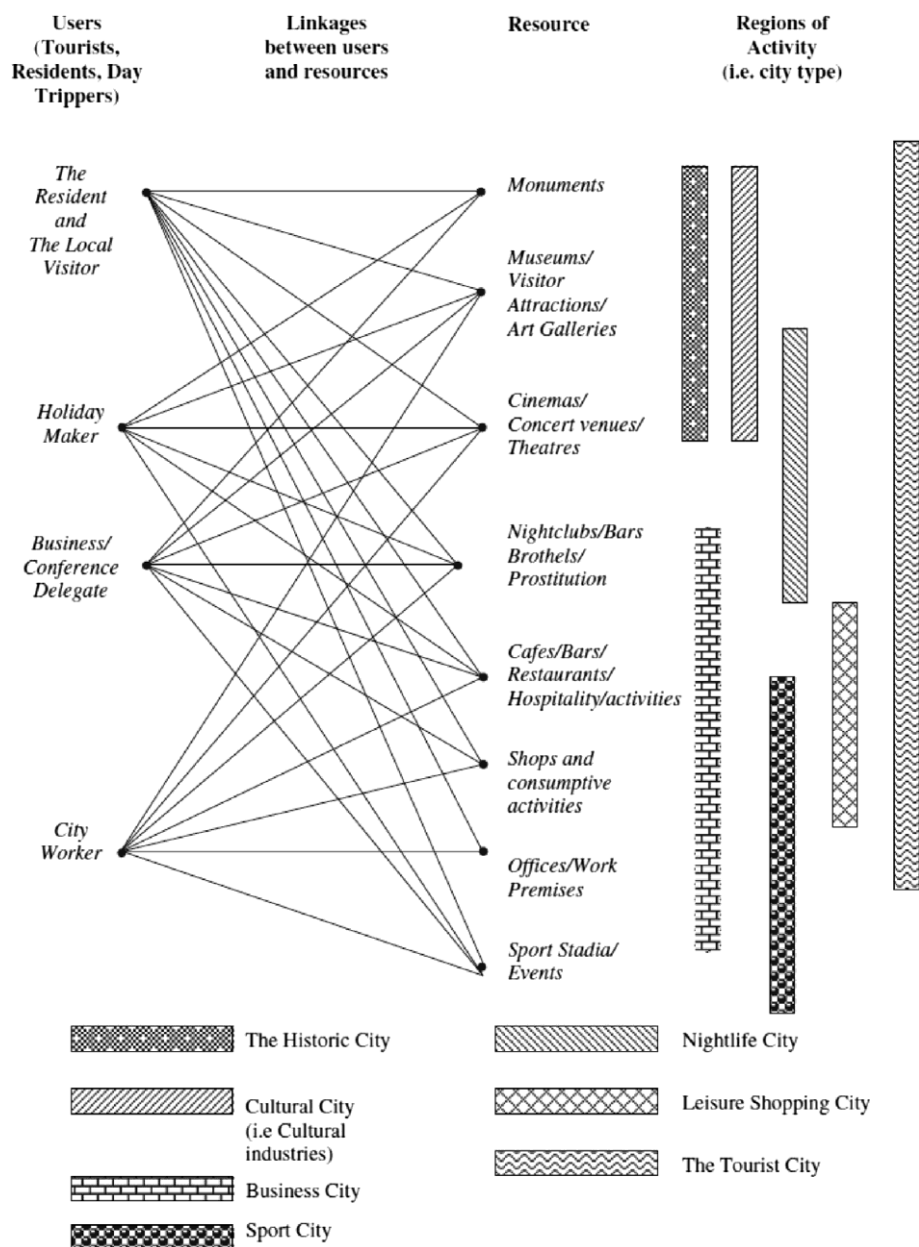


Fig. 1. Areas in the tourist city.  
Source: Ashworth and Page (2011: 10).

### **3. The role and importance of urban tourism strategic planning**

Strategic tourism planning is largely carried out by government departments to establish co-ordination and integration of tourism infrastructure and investments to match tourism policy with the complexity of a city determined by different geographical locations with multiple uses and different needs and opportunities (Rydin, 2011). Key factors should be assessed and evaluated during the strategic planning process, including: asset and infrastructure evaluation, investment incentives, market analysis, formulation of a marketing strategy, training and impact analysis to inform the planning process and policy consideration (Fyall & Garrod, 2005; Hall, 2008).

In terms of demand for urban tourism, the more traditional focus is only the description of who visits destinations, reasons for the visit and patterns of behaviour of tourist activities (Page, 1995). A more contemporary analysis also assesses the increased embeddedness of tourism offers within the normal life of a city necessitates the creation of new relationships between people dwelling in cities and people visiting them (Pappalepore, Maitland,

& Smith, 2010). As cities become more attractive as tourism destinations, tourists become more experienced and sophisticated in consuming the experience of urbanity. The situation creates problems for city planners in an increasingly crowded tourism marketplace particularly where there is a conflict of interest in the spatial use of a city area.

Chettiparamb and Thomas (2012) highlight the crucial role and importance of spatial and destination planning to ensure the socio- economic quality of life within the city is adequately managed to bring the optimal benefits to residents and tourists alike. In recent years, the idea that spatial planning has a distinctive remit to 'shape place' (Healey, 2006) has gained strength. For example where there are challenges within cities that reflect market failure of certain economic sectors, spatial planning can help to mitigate externalities, bringing together a variety of agencies, businesses, government departments and customers which alter traditional use of the urban space (Klosterman, 1985). Spatial planning can help to formulate the mechanism required to look for relationships between different variables and issues, such as consumer choice and demand, social impacts, economic structures and current land use (Cooper & Hall, 2008). Thus, spatial planning offers extensive opportunities for managing a destination from a multi-stakeholder perspective, an opportunity that is often missed in urban tourism planning (Sheehan & Ritchie 2005).

Thus, urban tourism strategic planning consists of two key processes: spatial planning and demand planning. Spatial planning involves the physical development of towns managed by engineers and architects and related to the promotion of health, economy and beauty of urban settings, and public administration and policy analysis, which focus on achievement of explicit policy goals defined by public agencies in an effective and efficient manner (Healey, 2006). Demand modelling practice in urban tourism ranges from simple to state-of-the-art statistical and econometric techniques (Dwyer & Forsyth, 2006). Song and Li (2008) reviewing studies on tourism demand modelling and forecasting published between 2000 and 2008, found a dominance of quantitative techniques, with only a few papers based on qualitative methods.

Fernandez-Güell and Collado (2014) also suggest tourism re-

searchers have rarely combined quantitative and qualitative tools in an integrated framework. Qualitative tools, such as foresight, is commonly used in strategic planning, both for establishing a common vision and to aid various policy-making bodies (Jemala, 2010), and helping spatial planning to be more holistic

(Fernandez-Güell & Collado, 2014). A particularly useful adjunct to

tourism strategic planning is scenario-based planning, which is one of the most popular foresight tools (Fernandez-Güell & Collado, 2014; Gössling & Scott, 2012). In addition systems approaches

(Page, 1995; Ritchie, 2003) need to be considered when analysing the future of the city by combining it with scenarios to ensure a more holistic strategic planning process.

### 3.1. *Scenario approach to tourism planning*

Scenario planning in tourism has evolved from forecast-focused models in the 1980s to complex, integrative and dynamic models in recent years, which combine qualitative and quantitative aspects of tourism development (Goëssling & Scott, 2012). Some of these innovative models have evolved into strategic online-based tools for planning (Goëssling & Scott, 2012). Applications in tourism cover a range of subjects such as climate change scenarios (for ski and coastal tourism), destination environmental footprint and transition management (Formica & Kothari, 2008; Goëssling & Scott, 2012). The evidence of scenarios in tourism has one common trait, they all incorporated stakeholders in the development, which Yeoman and McMahon-Beattie (2004) argued to be crucial in improving the quality of the scenarios. However, Goëssling and Scott's (2012) observation that scenarios are less applied in tourism than other industries have been confirmed in the literature review.

The main difference between scenarios and economic forecasting is whilst forecasting assumes that futures can be predicted, scenarios are used to understand how environmental changes affects, rather than predicts, future outcomes (Walsh, 2005). Dyson and O'Brien (2007) classified the approaches to scenarios in three different schools. The first, intuitive logics, is one of the most used approaches due to its qualitative nature which contains a number of discrete steps, varying from five to 15. The second approach is based on probabilistic modified trends. Time series analysis are used and adjusted to account for various future scenarios, but not widely used due to the technical skills involved. The last approach, 'la prospective', also known as the French school, places emphasis on alternative thinking in long-range decision-making.

### 3.2. *Systems approach to urban tourism planning*

Page (1995:17) suggests using a systems approach to analyse urban tourism since a key task is to "reduce the complexity of urban tourism into a number of constructs and components which highlight the interrelated nature of different factors affecting the system". Haugland, Ness, Grønseth, and Aarstad (2011) suggest that destination development should also consider an integrated multi-level perspective which includes the interdependencies between destination capabilities and co-ordination at the destination level. Under a systems approach, stakeholders and policymakers learn about the interdependencies and complexities existing in an urban tourist destination formed by multiple players (Sautter & Leisen, 1999). Among the different tools under a systems approach (Mingers & White, 2010), system dynamics (Sterman, 2000) has been widely employed in tourism. Table 1 demonstrates the varied types of analysis in tourism planning and their different modes of use including: forecasting tourism flows; supporting scenario modelling; consensus-making amongst stakeholders; building on learning processes to foster policy making for the future; and development decision support systems addressing sustainable tourism issues. System dynamics can be employed alone or in conjunction with other methodologies, especially with scenarios and operate as a tool employed by experts or a facilitation tool to support stakeholder engagement.

Compared to traditional scenario analysis approaches, system dynamics modelling offers the ability to visualise possible future developments using diagramming techniques in a qualitative manner, e.g. causal loop diagrams (Sterman, 2000), which can be developed with relevant stakeholders (Rouwette, Vennix, & Van Mullekom, 2002; Van den Belt, 2004). Furthermore, system dynamics modelling can be employed as a quantitative modelling technique, e.g. Xing and Dangerfield (2010), using multiple types of data.

Stakeholder involvement is an intrinsic feature in system dynamics modelling in two areas: model building in order to create model ownership and ensure implementation (Rouwette et al. 2002) and model use to facilitate learning about complexity and interdependencies in systems (Kunc & Morecroft, 2007; Kunc, 2012). Group model building processes to develop system dynamics models has been employed in diverse areas, including

critical infrastructure crisis management (Hernantes, Rich, Lauge', Labaka, & Sarriegi, 2013) and with stakeholders in climate change solutions (Tollefson, 2009), but not in urban strategic planning. s.

### 3.3. Strategic planning in tourism: Processes and stakeholders

Strategic planning in tourism is primarily performed by the public sector given its ability to: facilitate the development of infrastructure; regulate activities; manage land planning; define guidelines; preserve historical heritage and perform marketing of

the destination (Sim~ao & Partida'rio, 2010). It involves a set of op-

erations and actions to organise and control the development of the destination based on established objectives (Page, 2007) which may take two positions: proactive or reactive. A proactive position implies anticipation and looking to the future of the destination and bringing change through negotiation and compromise (Hall, 2008). Reactive planning involves ad hoc decisions and disorderly

Table 1  
Application of systems dynamics approaches to tourism planning.

Paper	Tourism area	Destination	Additional method	Key lessons
Bosch and Kambiz (2011)	Sustainable tourism development	Cat Ba, Vietnam	No	Differing mental models held by the different stakeholders were modelled and root cause to main problem identified. Model showed how different factors cause growth or decline in different parts of the system
Chen (2004)	Visitor dynamics in response to different environmental changes and investment policies	Hypothetical Natural Based Tourism region	No	Develop a natural resource-based tourism decision support system (DSS) to simulate the effect of environmental changes and policies. Five specific suggestions.
Georgantzas (2003)	Model Cyprus' hotel value chain to forecast tourist arrivals, bed capacity and profitability to see the effect of Government strategies	Cyprus	Value chain management; statistics	Four scenarios were produced, and among the results were specific outcomes in terms of the value chain, tourism growth and hotel room price seasonality. Inconsistencies and recommendation in regards to the current strategies were identified
Jiang, Li, and Xu (2010)	Transportation infrastructure investment and cultural heritage tourism development	Xidi, China	Scenarios	To investigate impacts of transportation infrastructure investment on the tourism development of Xidi and Hongcun World Heritage Villages
Koltchanov and Casanova (2004)	Foreign tourist flow to France	France	Scenarios	A simulation model to elaborate on the demand of the French ministry of Tourism to test various scenarios. Model presents outputs regarding attractiveness of France and competing countries and market trends of tourists.
Lei, Chan, Cao, and Zhou (2010)	Simulation of ecological footprint	Macao, China	No	Build a model consisting of three modules: ecological footprint (EF), city and tourism modules, to study ecological footprint
Schianetz, Kavanagh, & Lockington (2007)	Sustainable tourism	6 case studies	Organisational learning	The potential to foster learning in a tourism destination in order to improve sustainability and increased stakeholder participation mainly from tourism organisations and certain scientists (economists and ecologists).
Xing and Dangerfield (2010)	Sustainability of mass tourism in island tourist economies	Bali, Indonesia	Visioning, scenarios	Demonstrate the contribution for policy analysis. For decision makers to rely on models, focus should be placed on ensuring users confidence in the models
Law et al. (2012)	Green economy planning in tourism	Sharm El Sheikh (Egypt)	Scenario	A multidisciplinary approach drawing on the fields of sustainable tourism, destination management and system dynamics was applied to identify the requirements for green economy planning in tourism. A Decision Support System assisted destination policymakers, planners and managers with dynamic scenario modelling and planning to help understand and manage the drivers of change.

activity (Sima~o & Partid'ario, 2010). To assist implementation of strategic planning the process involves four steps: analysis, formulation, implementation and performance evaluation (Hall, 2008; Sima~o & Partida'rio, 2010) which are determined as follows: Analysis is the involvement of stakeholders to identify their motivations and interests; Formulation involves the definition of the mission and the vision leading to long-term objectives and guidelines; Implementation implies the commitment of resources and activities to fulfil the plan; Performance evaluation controls the implementation of the strategic plan (Sim~ao & Partida'rio, 2010). In a destination context this applies to DMOs, which provide leader- ship and coordination for the destination whilst managing the complexity of the tourism system (Ritchie & Crouch, 2003).

Finally, the process of strategic planning should be contextualised by representing public interest. Dredge (2010) proposes a set of perspectives influencing the involvement of diverse stakeholders in the process. For example, a rational perspective is originated from the rational scientific view of planning and involves the use of tools to provide rigour on the evaluation of tourism plans where public interest is defined by a transparent decision making process (Dredge, 2010). A neoliberal perspective reflects corporatist public policy making where market forces and coalitions of corporate interests define tourism plans (Dredge, 2010). Participatory planning involves the diffusion of power across broader society and local councils should incorporate all views from diverse stakeholders (Dredge, 2010) and evaluate the trade-offs involving tourism plans.

#### 4. Methodology

Since urban tourism planning processes mostly consist of linking different types of knowledge to actions in the public domain (Friedmann, 1987), system dynamics modelling fits well into the processes of urban tourism strategic planning. This research integrates scenario planning with system dynamics through an analysis of future scenarios for the Bournemouth 2026 Strategic Plan (Bournemouth Borough Council, 2012a,b). This is achieved through simulating the scenarios in a purposely-built simulation Model using system dynamics.

The research methodology involves a case study undertaken within Bournemouth Borough Council (2012a,b) involving three key sources of research data including eight in-depth semi-structured interviews (detailed in Table 2); email questionnaire and secondary data analysis. This led to the identification of causal relationships between multiple sub-systems (Page, 1995) that co- exist and offer diverse activities attracting different types of urban tourists which helps define the destination image (Chi & Qu, 2008). Subsequently, causal relationships are employed in a simulation model depicting the complexities and interdependencies in the destination (Ritchie & Crouch, 2003).

##### 4.1. *The context of the research*

At a conference in November 2006, entitled the Bournemouth Partnership, representing nearly 200 organizations in the public, business and voluntary sectors of the local community, created a long term vision for Bournemouth. The partnership was renamed "Bournemouth 2026 Trust", a registered charity in 2012, led by the public sector, communities and businesses, to improve the quality of life in Bournemouth via a strategy and a vision for the town formulated in the document "Bournemouth 2026".

In 2006, Bournemouth also established an innovative Tourism Board known as Bournemouth Tourism Management Board BTMB (see [www.bournemouth.co.uk/btmb](http://www.bournemouth.co.uk/btmb)) for a comprehensive list of members which form the multi-stakeholder partnership from all sectors of the visitor economy including transportation, international student organisations, accommodation, town centre security, conferences, entertainment and arts and culture organisations. The BTMB's constitution emphasises how members are collectively



responsible for the destination management of the town, similar to a DMO. A Bournemouth councillor stated that the board “enables fully integrated effort and the council working with the private sector is crucial if the resort is to deliver sustainable projects” (Smith, 2011).

BTMB is co-responsible for managing the allocated tourism budget for the council and providing an integral function in the decision making process at the council. However, the ultimate decision is made by the councillors of Bournemouth Borough Council. BTMB is different from more traditional tourism partnerships in that it is not only involved with marketing and promotion of the destination, but also has an advisory role in operational and planning aspects. The BTMB meets once a month, and a representative from each sector is required at each meeting in order to ensure the contribution from all sectors.

In 2012 Bournemouth Borough Council, with support from BTMB, published a long-term strategic document known as “Bournemouth Local Plan: Core Strategy”, which formed part of the Bournemouth Vision 2026, with key objectives of how the council would like tourism to develop by 2026 (Bournemouth Borough Council, 2012a,b). “Bournemouth 2026” includes strategies for how tourism should develop in order to be an even more important contributor to the local economy in the years to come (Bournemouth Borough Council, 2012a,b). The following key strategic priorities were identified in the plan: To improve the quality of parks and countryside; increase regeneration for those areas most in need and improve cultural and entertainment offers to attract families.

Whilst the council was supported by BTMB in the long term vision, the time horizon for the priorities set by BTMB are shorter (typically between 12 and 18 months) in order to govern the interest of its members who are directly involved in local and regional trade. Although BTMB is an advisory partnership, due to its

Table 2  
Strategic planning process for Bournemouth tourism.

Strategic planning process Key Actions taken in Bournemouth steps	
Analysis	Conference in November 2006 with nearly 200 organizations created a long term vision for Bournemouth called “Bournemouth 2026”
Formulation	Bournemouth established a tourism board known as the Bournemouth Tourism Management Board (BTMB). Bournemouth Borough Council, with support from the BTMB, published in 2012 a long-term strategic document known as “Bournemouth Local Plan: Core Strategy”, part of the Bournemouth Vision 2026, with key strategic priorities.
Implementation	BTMB is co-responsible for managing the allocated tourism budget for the council and the tourism board has an integral function in the decision making process at the council.
Performance evaluation	Bournemouth Borough Council runs the Economy and Tourism Overview and Scrutiny Panel, comprised of councillors, community representative and managers, which meets frequently to evaluate the performance of the destination using Quarterly Monitoring Reports For Economy & Tourism.

influential role in the council's decision-making process, BTMB act as a spatial and tourism planning forum (Healey, 2006). In addition to BTMB, the Bournemouth Borough Council has involved other parties in the strategy process. Examples include external facilitators and organisations such as the NCTA to harness ideas by the councillors and BTMB members regarding innovation similar to the cases reviewed by Carlisle, Kunc, Jones, and Tiffin (2013).

Importantly the case study research took place following the stages of analysis and formulation (see section 3.3) of the Bournemouth 2026 strategy that had already been performed by the BTMB with relevant stakeholders prior to the research taking place. This case study evaluates the potential implications of the implementation of the 2026 strategies not their analysis or formulation (see Table 2).

#### 4.2. *Data collection methods*

A triangulated structure for the data collection (Decrop, 2004) encompassed eight in-depth semi-structured interviews with the Service Director for Tourism and Corporate Communication in Bournemouth Borough Council; the Managing Director of BTMB; Chair of the International Education Forum who sits on the BTMB; Two additional members of BTMB; the International Officer for the National Union of Students (NUS); Associate Director of TRI Hospitality Consulting; the College Administrator of Bournemouth and

Poole College. Initially twelve emails were sent out to the BTMB members with a customised reply form questionnaire (see Fig. 2) and five replied (42% of responses) stating that they would be willing to contribute to complete the reply form and participate in a semi-structured interview. Usually the elicitation process to identify the causal relationships (Fig. 2) is performed through facilitated discussions, e.g. Xiang and Formica (2007) and Rouwette et al. (2002), occurring in workshops arranged by a member of the organization. Our research departed from this approach as we did not have a particular BTMB member encouraging the rest of members to participate, which could be contributed to the lack of knowledge regarding the new methodology, so the BTMB members who participated showed particular interest in the methodology. This provided a strong level of interest expressed in the methodology by BTMB participants (42%) which does not differ from studies evaluating the percentage of people who are interested in understanding complex systems, e.g. Sterman (1989); Cronin, Gonzalez, and Sterman (2009) and Kunc (2012) Table 3 summarises the purpose of the semi-structured interviews and BTMB reply form data collected for the Systems Dynamics Model and the Scenario based planning process. Analysis of the reply form data demonstrated perceived relationships (second, five, six and last columns) between different sub-systems and activities related to tourism in Bournemouth as suggested in Page (1995:18). The relationships and their importance together with their uncertainty (columns three and four) subsequently were used as a base for further interviews with BTMB members and other interviewees. Further discussion regarding stakeholder engagement in this study is developed in section 6.

Finally, to validate the relationships and triangulate the data collection process to develop the simulation model, secondary data analysis of policy and strategy documents and reports from Bournemouth Borough Council, consultancy firms and relevant websites were utilised.

### 4.3. *Applied methodologies*

#### 4.3.1. *Scenario planning*

In creating future plausible scenarios for Bournemouth, Dyson and O'Brien's (2007) intuitive logic approach was applied as a popular tool for policy planning due to its qualitative nature and ease of use (Wright & Goodwin, 2009). The method is regarded as a top-down approach, where the scenario themes are set from a set of key uncertainties shaping the future, before projecting the identified factors to be consistent with each of the scenario themes (Dyson & O'Brien, 2007). The steps performed to develop the scenarios were:

1/Setting the scene e Defining the issues and the people participating in the exercise e Actors involved: BTMB and research team

2/Generating uncertain and important factors affecting tourism in Bournemouth e Actors involved: BTMB and research team 3/Reducing the number of factors into two key dimensions: A causally related set of factors and defining their range of values e Actors involved: research team

4/Choosing the scenario's theme for the combination of the key dimensions e Actors involved: research team

5/Presenting the scenarios in terms of causal relationships and future value of key constructs of the Bournemouth urban tourism system using system dynamics e Actors involved: research team

#### 4.3.2. *System dynamics modelling process*

The System Dynamics modelling process is based on Sterman (2000) where most of the information employed is not numerical, but qualitative utilising interviews and strategic reports. Qualitative data to develop the System Dynamics model was initially based on the reply forms obtained from BTMB and the information was triangulated with interviews to members of BTMB and other informants as well as

secondary data analysis of policy and strategy documents and reports from Bournemouth Borough Council (see section 4.2). In System Dynamics modelling, the results from the interviews are translated into a set of causal relationships between variables (see Figs. 2e7) leading to feedback loops (Law et al., 2012). Then, equations are formulated and quantitative data is obtained to populate the model (Law et al., 2012; Xing & Dangerfield, 2010).

## **5. Results and analysis**

### *5.1. Urban Tourism Market Complexity Model*

The following figures and tables translate the findings of the case study research into implications for the implementation of the Bournemouth 2026 strategy considering. Table 4 shows the main visitor segments identified in a Bournemouth Borough Council funded study (Team Consulting, 2008).

After analysis of the above statistics in association with the findings from the Bournemouth Borough Council (2011) and the BTMB responses, it became apparent that Bournemouth's two main revenue generating market segments, educational and staying visitors (see Table 4), possess conflicting characteristics. According to the Bournemouth Borough Council (2011) the main issue affecting the higher spending “staying visitors”, who are the domestic holidaymakers and domestic tourists on short breaks, are the increasing concerns regarding disturbance, anti-social behaviour and littering, which are associated with the increasing student population. Other concerns relate to expensive hotels and limited offer of leisure attractions (Bournemouth Borough Council, 2011). From the interview with the Chair of the International Education Forum of BTMB, it was clearly emphasised that the busy nightlife plays an important role in attracting students to the town, with approximately 85% of language college students under 25 years, the prospects of a good nightlife are equally important for the students as the quality of teaching at the language schools. Subsequently, night-time crowdedness increases the attractiveness for such students, who are looking for an exciting destination to socialise. Such mixed behavioural characteristics and expectations of these two market segments creates important challenges for the destination planning scenarios. The economic value and volume of each of the tourism segments is illustrated in Table 5.

Table 5 demonstrates how the educational visitor segment, despite less numbers, accounts for approximately 20% of the total visitors' days with an average stay of 49 days contributing significantly to accommodation revenue and language school fees. This results in the student market contributing the highest spending per day (including accommodation spending and college fees), and as such, is viewed by the council to possess great potential in developing Bournemouth.

Based on the information obtained from BTMB and confirmed by the other eight interviewees, four main factors determining the overall attractiveness of studying in Bournemouth, illustrated in Figs. 2e7, were identified and employed to create the Urban

#	Factor (able to affect the tourism industry)	Importance to Tourism Industry <i>A - E</i> <i>A = High</i> <i>E = Low</i>	Level of Uncertainty (Regarding future of Factor) <i>1-5</i> <i>1 = High</i> <i>5 = Low</i>	Relationship	Positive or Negative *	Leads to/Effect
<b>Examples(not of Bournemouth)</b>						
1	Development of new Budget hotels	B	2	→	+	Lower average hotel prices
2	Reduced tax on services	A	2	→	-	Average service Price
3	Investments in Infrastructure	C	5	→	+	Accessibility
4	Accessibility	B	4	→	+	Attractiveness of the City
5	Increased number of tourists	A	1	→	+	Crowdedness
6	Crowdedness	B	2	→	-	Attractiveness of the City
<b>Factors from BTMB' Member</b>						
1	Government legislation regarding student visas	A	5	→	-	Confusion regarding the visa system; clients switching to competitor countries
2	Positive PR relating to international education pathways in the area	A	1	→	+	Confidence in the area as a destination providing excellence in education
3	Perception of quality service given by existence of accreditation schemes for education providers	B	2	→	+	Confidence in the area as a destination providing excellence in education

Fig. 2. Sample Reply form.

Table 3  
Sources and themes of primary data collection.

Institution	Participant	Information
Bournemouth Borough Council	Service Director for Tourism and Corporate Communications	Evaluation and Insights into the strategic planning process, strategic tools and BTMB's role in decision making processes
BTMB	Managing Director Chair e International Education Forum Two Undisclosed Members	Key variables representing the factors that determine the coastal urban system and their relationship for the model
Bournemouth & Pool College	College Administrator who is also member of BTMB	Colleges sizes and utilized capacities
TRI Hospitality Consulting	Associate Director	Global Leader in Hotel Development: Bournemouth Accommodation provision, hotel development, completion times and hotel closures
National Union of Students (NUS)	International Officer	Factors affecting student arrivals into the UK, demand for education in Bournemouth. Discuss BTMB views in relation to students

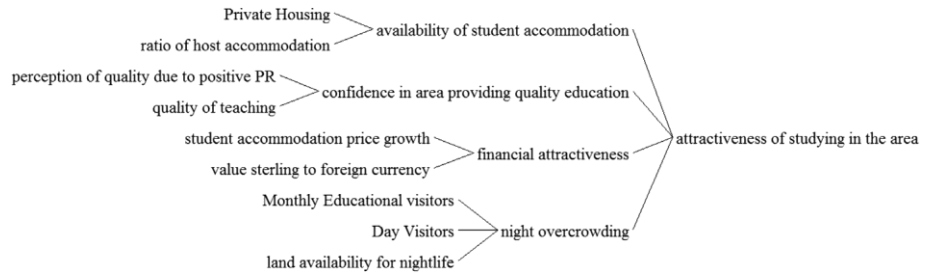


Fig. 3. Destination Attractiveness drivers for educational visitors.

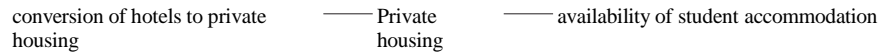


Fig. 4. Availability of student accommodation.

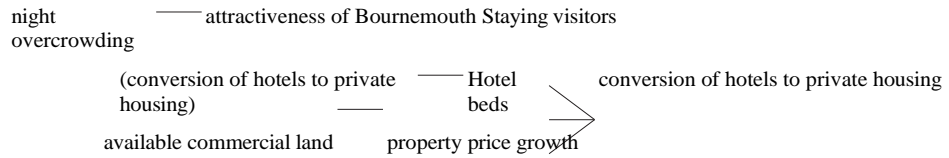


Fig. 5. Conversion of hotels to private housing.

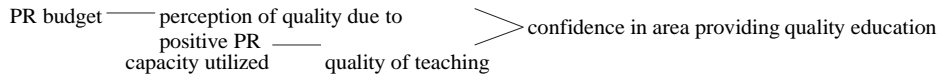


Fig. 6. Confidence in area providing quality education.

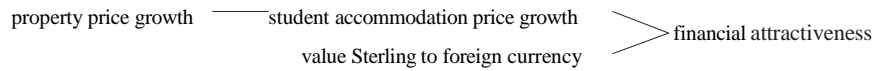


Fig. 7. Financial attractiveness for students.

Table 4  
Main visitor segments.

Segment	Description	% of total expenditure
Meeting and conferences	Overall market not of great value, but high yield per night and helps de-seasonalise the market	4e5%
Non-discretionary business tourism	Low volume, high yield and contribution. Non seasonal	5%
Educational and language schools	High overall contribution but differing data on impact	30%
Domestic short breaks	Degree of seasonality, high spend, some potential of development	3%
Domestic holidaymakers	Important segment focused on relaxation and beach holiday	40%
Visiting friends and relatives	Low potential growth (without population growth), also a leisure elements in their visits	3e6%
Day visits	Largest segment in volume, low yield. Potential of growth	11e15%

Source: Team Consulting (2008).

Table 5  
Volume and value of main visitor segments (2007).

Segment	Number of visitors	Visitors (%)	Average length of stay (days)	Total annual staying days	% Total days	Total spend (£m)	Spend (%)	Average spend per day (£)
Staying visitors	1,014,000	24.8	4	4,056,000	45.8	238	55.0	58.70
Day visitors	3,042,000	74.3	1	3,042,000	34.4	65	15.0	21.4
Educational	36,000	0.9	49	1,752,000	19.8	130	30.0	74.2
Total	4,092,000		2.2	8,850,000		433		48.93

Source: Team Consulting (2008).

Tourism Market Complexity Model. Given the extensiveness of this Model, detailed information on the equations and data sources can be obtained directly from the authors.

The availability of student accommodation and night crowdedness are two significant factors that relate to urban spatial issues whilst confidence in Bournemouth providing quality education and financial attractiveness are factors influencing educational tourism demand, see Fig. 3. Fig. 3 aims to reflect all relationships identified by the interviewees (see Fig. 2).

### 5.1.1. The availability of student accommodation

It was identified as an important growth inhibitor by the BTMB and NUS. Of the 36,000 yearly educational visitors, 92% stay with host families and the remaining 8% stay in commercial accommodation (Team Consulting, 2008). The availability of accommodation for this segment is therefore greatly dependent on the availability of private housing. From the BTMB questionnaire and BTMB interview responses, the number of houses available for students depends on the total number of private accommodation units and the ratio of these willing to be a host family for students. The Bournemouth Borough Council (2012b) identified that as property prices increase, smaller hotels and B&B's are converting their properties into private accommodation as it yields a better return than serviced accommodation. Fig. 4 below illustrates this relationship.

Assuming that the average size of a conversion flat is 80 square metres (Philipson, 2013), the total smaller hotels and B&B's market represents approximately 1300 potential new residential units. The initial stock of houses in Bournemouth is 69,000, based on data from Bournemouth Statistics (2008) and the Housing Statistical Release (2011). TRI Hospitality Consulting confirmed the conversion of hotels to residential units takes approximately two years, including the planning process. Furthermore, TRI Hospitality Consulting suggested hotels are less likely to convert to residential units if they are experiencing significant occupancy levels so a high growth rate of staying visitors reduces the conversion rate of hotels into residential units. Finally, the conversion rate further depends on the property price growth with the rate increasing as property prices increases (TRI Hospitality Consulting). Fig. 5 below presents these variables affecting the conversion of hotels to private housing.

### *5.1.2. Confidence in quality education provision.*

According to the BTMB questionnaire and interview responses, the confidence in Bournemouth as a provider of quality education is one of the main drivers for the attractiveness of educational visitors. The confidence depends both on the actual quality of education within the relevant education institutions and on Public Relations (PR) and its effectiveness. According to the Bournemouth

& Poole College administrator, PR activities, e.g. awareness campaigns in European countries, could take one year to affect the perception of quality among potential educational visitors. The PR budget is relative in size to the amount of language schools existing in Bournemouth and their income. BTMB Chair e International Education Forum, emphasized the factor with the most damaging effect on the quality of education is the seasonal shortage of qualified staff, especially during times when the school capacity is higher than 80%. Higher ratio staff/students reduce the quality of the education. The total student capacity is found by multiplying the number of schools with the capacity per school. In 2009, a total of 28 (16 accredited and 12 non-accredited) schools were located in Bournemouth (Language Course Directory, 2015). Each year 36,000 educational visitors arrive to Bournemouth but, due to seasonality patterns, August experiences the largest number of students: 7125 students, corresponding to 255 students per school. The average capacity of the schools was found during the interview with the Bournemouth & Poole College administrator who suggested the monthly capacity per school is 300. The variables influencing the confidence in Bournemouth as a provider of quality education is presented in Fig. 6.

### *5.1.3. Financial Attractiveness*

The financial attractiveness for students is influenced by the price for student accommodation and the exchange rate of Sterling pound with respect to foreign currency (NUS International Officer). Additionally accommodation related costs represent more than one third of students' expenditure and is the main measurement of the financial attractiveness factor. However, the cost of host family-based student accommodation has increased at a lower rate than the growth in property prices. Since the majority of students originate from continental Europe (Chair of International Education Forum), the exchange rate between Sterling pound and Euro is a key factor for the financial attractiveness for studying in Bournemouth. The variables affecting the financial attractiveness for students are presented in Fig. 7 below.

### *5.1.4. Night-time Overcrowding*

While overcrowding was an important factor for all of the interviewees except the NUS, they didn't have enough information to measure it, therefore academic literature helped define the issues and identify measurements. An important attraction to students is their preference for beach holidays and having fun and relaxing after their studies (Xu, Morgan, & Song, 2009). While night-time overcrowding improves the study attractiveness of the area for students and enables a landscape of symbolic geographies of student life (Chatterton 1999; 2010), it negatively impacts staying visitors and local inhabitants (Andereck, Valentine, Knopf, & Vogt, 2005). Townsley and Grimshaw (2013) observed important relationships between levels of crowding and aggression in entertainment precincts and suggested the design of public spaces in entertainment precincts can help to reduce aggression. The total nightlife crowd is the number of day visitors and educational segments divided by the amount of the land available for nightlife, as illustrated in Fig. 8 below. This measurement is an accepted and robust method to measure crowding (Manning, Lawson, Newman, Laven, & Valliere, 2010).

To explore this issue further Fig. 9 illustrates the limited capacity of the current night-life scene. The orange discs are the main areas of after-dark activity whilst the white ones could be better used.

The Bournemouth Borough Council (2011) completed by Bournemouth Borough Council in 2011 implies that 30% of day visitors (increasing annually by 1%) may visit Bournemouth's nightlife, whereas 85% of educational visitors frequently go out. Although the attractiveness of Bournemouth for staying visitors is negatively influenced by the level of overcrowding, the impact is only perceived 12 months later because staying visitors, who are usually families on holidays or city break tourists, may return to a holiday back to Bournemouth the following year (Bournemouth Visitor Survey, 2011).

## 5.2. Scenarios for the Bournemouth 2026 tourism strategy

After analysing the above influencing factors of Bournemouth's attractiveness as a destination, the factors for the scenarios were selected through a close examination of the document "Bournemouth Vision for 2026" (2006) and validated with semi-structured interviews from BTMB members.

The key factors influencing the five main strategies of Bournemouth's vision were identified in Table 6. These factors were then measured by their importance to tourism development in Bournemouth and their level of uncertainty. In this process, the written and oral responses from the BTMB interviews, key determinants for tourism development in Bournemouth were used, which resulted in a reduction in the identified factors (in bold and underlined in Table 6). Then, the responses from the members of the BTMB served as the basis for selecting two of the 11 factors to set the theme for the scenarios (Dyson & O'Brien, 2007). The factors "Attractiveness for Staying Visitors" and associated "Level of Investment" were identified as highly uncertain and highly important for tourism development in Bournemouth by the eight interviewees, where the level of investment is defined as private, inward investments into the Bournemouth economy. Based on these two factors, four distinctive and plausible Future Scenarios for Bournemouth 2026 have been developed, see Table 7 which presents a summary of the narratives describing each scenario for future planning.

Scenario B "Little Maritime Village" represents the scenario where Bournemouth continues to develop in line with historic patterns. Scenario A has a higher level of PR budget to promote Bournemouth as an English language learning destination so there is a growing number of educational visitors, who stay longer time as the exchange rate is favourable and find more hosting houses. Scenario C show important developments in the entertainment district compared with scenario A but there is a simultaneous campaign to attract students (PR budget is high). Consequently, the problem of overcrowding is not solved. Scenario D implies a trade-off between students and staying visitors as the entertainment area is strongly developed aiming to top end of staying visitors but the budget to attract students is reduced substantially reducing the attractiveness of Bournemouth for students. Table 8 presents the values of the model's key variables assumed under each of the four scenarios. The values of the variables for each scenario have been estimated based on variations of Scenario B in order to be consistent with each of the envisaged futures outlined in Table 7.

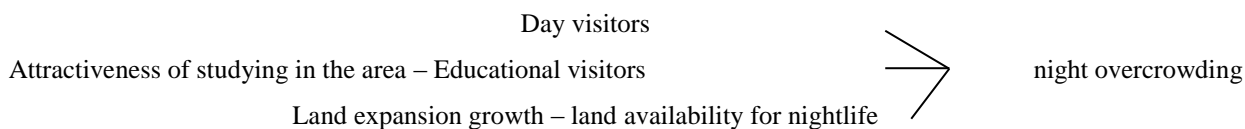


Fig. 8. Factors defining night overcrowding.



Fig. 9. Areas for nightlife activity (The Future of Bournemouth's nightlife, bournemouthecho.co.uk, 25/06/2012).

The simulation results of the model until 2026 under each of the four scenarios is presented in Table 9. The results were generated using the model under the diverse conditions indicated by each scenario in Table 8. It is beyond the scope of this paper to detail the more than 30 different equations necessary to illustrate how the following figures are calculated. However, these are available from the authors.

All scenarios foresee an increase in the number of visitors days compared with the current numbers (see Table 5). However, the mix between education and staying visitors varies across the four scenarios while day visitors grow in a steady rate. From the demand planning perspective, the number of staying visitors under the different scenarios illustrate the sensitivity of the issue identified by BTMB members regarding night-time overcrowding where the number of



people using the nightlife areas increases as the number of tourists increases and the available commercial land remains stable (Scenario A). The result shows the important trade-offs that may exist between diverse urban tourist segments when there are overlaps in the use of spaces. The current situation, and reportedly the main source of this issue, is that a significant proportion of the night-life activity is clustered in a few areas within the town centre (see Fig. 9). This issue can be observed by the level of crowdedness (152.2) projected under the “Urban Decay” scenario, in which the numbers of educational and day visitors are high and the availability of commercial land is relatively low (see Table 8). On the other hand, when commercial land is vastly available in “English Ibiza” scenario, the Night Overcrowding index (146.7) grows less than Urban Decay even though there is a strong growth in number of annual staying visitors and education visitors. However, the most significant trade-off occurs in “English Dubai” when the index (135.5) barely increases even with high number of staying visitors since students, as growth strategy for visitors, are completely abandoned due to low investment in PR and residential dwellings (see Table 8).

Table 6  
Factors identified from the Bournemouth Vision for 2026.

Investing in people Action plan	Thriving economy Action plan
<ul style="list-style-type: none"> <li>•Education and skills development gap</li> <li>•Children and young people are safe, emotionally healthy</li> <li>•Health, achievement and social outcomes for young people</li> <li>•Traditionally marginalized and excluded groups feel welcome into mainstream society</li> <li>•Local people have choice and influence over local decision making greater role in public service delivery</li> <li>•Cultural activities and experiences are available</li> <li>•Basic skill levels of people</li> </ul>	<ul style="list-style-type: none"> <li>•<u>Competitive Economy</u></li> <li>•<u>Supply of sites &amp; premises</u></li> <li>•Employee remuneration</li> <li>•<u>Employment land and premises</u></li> <li>•Retail Outlets</li> <li>•<u>Destination attractiveness</u></li> <li>•Employee knowledge</li> <li>•Level of innovation</li> <li>•Level of research</li> <li>•<u>Development investment</u></li> <li>•<u>Level of investment</u></li> </ul>
<ul style="list-style-type: none"> <li>•<u>Workforce skills</u></li> </ul>	
Safer & Stronger Communities Action Plan	Sustainable Environment Action Plan
<ul style="list-style-type: none"> <li>•Overall crime</li> <li>•Fear of crime</li> <li>•Harm caused by illegal drugs</li> <li>•<u>Anti-social behaviour</u></li> <li>•Arson and domestic fires, levels of safety improvements</li> <li>•Opportunities regardless of background and poverty</li> <li>•Financially secure</li> </ul>	<ul style="list-style-type: none"> <li>•<u>Public transport</u></li> <li>•Congestion</li> <li>•Transport and highway infrastructure</li> <li>•Public spaces, play areas and physical resources</li> <li>•Use of resources</li> <li>•<u>Housing quality</u></li> <li>•Housing in Bournemouth is energy efficient</li> </ul>
Health & Wellbeing Action Plan	
<ul style="list-style-type: none"> <li>•Hot meals are available for all children</li> <li>•Carers are supported</li> <li>•Supported in their choice of care and housing circumstances</li> <li>•Mental health and well-being</li> </ul>	

Table 7  
Scenario matrix.

		Attractiveness for "staying visitors"	
Level of investment		<i>Low</i>	<i>High</i>
	<i>Low</i>	<p><b>Urban Decay e A</b> The streets are crowded and the town perceived as not being safe, mainly caused by the extended night-life offer. This has reduced the attractiveness for investors and staying visitors.</p>	<p><b>Little Maritime Village e B</b> The town is attractive for overnight visitors due to the tidy public areas and the eliminated issues with high-time overcrowding. However, the limited investment in new hotels and cultural activities is limiting growth.</p>
	<i>High</i>	<p><b>English Ibiza e C</b> Both public and private investment in nightlife creates a great base for the town's entertainment development. Issues with high-time overcrowding and littering are however alienating the higher spending visitor segments.</p>	<p><b>English Dubai e D</b> Night-time overcrowding and anti-social behaviour is an issue from the past. New investments has resulted in new higher quality, internationally branded hotels and extended cultural offers.</p>

Table 8  
Overview of key variable values under each scenario.

Variable	Scenario			
	A	B	C	D
PR Budget <i>Range 1e10; 1 ¼ Reduced budget</i>	8	6	5	2
Available commercial land ( <i>Range 0e4; measured in additional hectares of land available for commercial activity</i> )	0.5	2	1	3
Day Visitor Growth rate (%)	0.9	1	0.8	0.7
Length of stay Educational Visitors ( <i>Days</i> )	50	45	50	45
Value Sterling to foreign currency ( <i>Sterling to Euro</i> )	1.05	1.2	1.1	1.3
Ratio of host accommodation ( <i>% of house stock available for students</i> )	15.0	9.0	10.5	8.0

Table 9  
Overview of values of selected key variables under each scenario.

	Scenario A "Urban Decay"	Scenario B "Little Maritime Village"	Scenario C "English Ibiza"	Scenario D "English Dubai"
Annual educational visitor days (000s)	3338.7	1500.2	3801.6	1873.2
Annual day visitors days (000s)	3511.1	3567.6	3455.6	3401.0
Annual staying visitors days (000s)	2511.1	3025.3	2962.9	5696.1
Attractiveness of studying in the area (Index, Base ¼ 2)	3.74	3.01	3.04	1.75
Residential dwellings	51,354	51,022	51,144	50,600
Student accommodation price growth (%)	5.0	3.4	4.5	2.7
Night overcrowding (Index, Base ¼ 130)	152.2	146.7	147.0	135.5
Total tourism spend (Year 2026) (£million)	550.9	485.8	543.1	598.5

## 6. Discussion

This case study demonstrates the strong interdependence between main tourist segments comprising any tourism system; in the case of Bournemouth: educational visitors, day visitors and staying visitors. The interdependences are significant in the use of 'spatial bottlenecks', such as leisure areas, where the extended use by one segment can alienate the other segments affecting not only the strategic objectives of the community but also reducing the potential economic performance of tourism (see last row in Table 9). This poses the question whether the concentration or scatter of tourism resources is desirable and should be implemented accordingly, an area related to spatial planning (Law, 1994), as well as the impact on limitations on tourism resources in future tourism demand. Moreover, the results show the importance of considering educational visitors in urban planning processes, a segment not included in Ashworth and Page's (2011) model.

Managing urban tourism through strategic planning methods based on systems approaches can aid mitigation of problematic or challenging externalities and provide a coordinating mechanism for multiple actors to fulfil the vision for the location (Chettiparamb

& Thomas, 2012) and help create innovative segmentation approaches (Ashworth & Page, 2011). One of the main weaknesses of the quantitative techniques applied is the difficulty to actively include stakeholders in the process of building a model due to the high level of technical skills required (Song & Li, 2008) and stakeholders may not have enough confidence in the results to use it for decision making. However, the BTMB members who participated showed particular interest in the methodology revealing interest in understanding tourism as a complex system. Stakeholders are particularly important to achieve sustainable economic impact on tourism destinations (Carlisle et al. 2013) so techniques, or a combination of them, need to be evaluated in terms of stakeholder involvement. Therefore to overcome this issue, the approach employed in this paper involved key interviewees (Table 3) and secondary data analysis to identify the key relationships in the Urban Tourism Market Complexity model (Fig. 3) and to participate in the modelling and scenario process (section 5.1). However, our stakeholders are only related to strategy implementation not strategy formulation (see Table 2). Their participation transformed the project into an opportunity for learning about the complexity in urban tourism and potential trade-offs within BTMB (Ashworth & Page, 2011). The use of scenarios involving stakeholders, still under-used in tourism (Goßling & Scott, 2012), provides opportunities for checking expectations of stakeholders regarding vision statements and potential investment decisions as discussed in section 5.2. The combination of both methods can be a useful approach in urban strategic planning to analyse the robustness of visions and strategies.

One important lesson from the case study is the contextualisation of systems modelling with respect to the representation of the public interest. In our case, the model was employed within a rational perspective (Dredge, 2010) where the use of the system dynamics modelling provided rigour on the evaluation of tourism plans already defined by the community through "Bournemouth 2026" and being implemented by BTMB similar to other system dynamics

works (see Table 1). System dynamics can also be employed in participatory mode to support strategic planning by involving stakeholders in group model building processes (Rouwette et al. 2002). In such a case, the sample of stakeholders involved would be completely different bringing a wider set of actors pertaining to the destination. Recommendations for further research will consider this possibility in order to evaluate the issues facing stakeholder involvement in strategic planning in urban coastal situations.

## 7. Conclusion

Ashworth and Page (2011) identified that as cities become more attractive as tourism destinations, they create problems for city planners to distinguish themselves in an increasingly crowded marketplace particularly where there is a conflict of interest in the spatial use of a city area. However, there is little development of systematic methodologies for understanding urban tourism due to its broad variety and strong interactions between the diverse tourist segments. Therefore multiple products and experiences within a city need diverse sets of assets and infrastructure which impact on their evaluation of the type, of investment incentives, market analysis and formulation of marketing strategies (Hall, 2008). This paper has demonstrated that management of complex relationships through strategic planning based on a systems approach combined with other methodologies can help identify negative externalities and provide coordinating mechanisms for future strategic decisions for urban development.

As Bournemouth has improved its tourism profile and diversity of urban tourist experiences over recent years, the growth of educational visitors and younger tourists visiting for the nightlife has resulted in a conflict of interest with families and other over- night visitors. The results indicate the trade-offs in the tourism destination between staying visitors or educational visitors, an area not completely understood in (coastal) urban strategic planning. Our multi-methodology approach showed trade-offs can be important factors influencing the achievement of the vision and the potential implementation of strategies.

The trade-offs in the tourism destination involve stakeholders from across the visitor economy. Thereby involving them in understanding the relationships between the key components in urban area's tourism system is an important outcome of the methodology employed. Furthermore, by involving the key stakeholders in simulating different plausible futures (Carlisle et al. 2013; Sautter & Leisen, 1999), or scenarios, for specified destinations, the proposed approach could contribute to increased understanding amongst local stakeholders and can potentially be replicated in many situations where there is a conflict of strategic direction for urban or even rural tourism development. Unfortunately, our work involved one set of stakeholders, BTMB members, in a particular step of the strategic planning process, strategy implementation.

Further research will need to consider the impact of multi- methodology systems approaches in other steps of the strategic planning process, under different tourism contexts and with diverse levels of involvement of similar and different stakeholders to confirm our findings. For example, the use of systems approaches during strategy formulation may address issues such as group negotiation, e.g. political dimensions, during the development of strategies with multiple stakeholders in an urban tourism destination.

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