Athens Journal of Tourism

Front Pages

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The ***Athens Journal of Tourism (AJT)*** is an Open Access quarterly double-blind peer reviewed journal and considers papers from all areas of tourism and related disciplines such as culture, leisure, recreation, geography, urban planning, heritage, sports, historical cities, landscape, architecture etc. The AJT considers theoretical and empirical papers as well as case studies and policy papers. The journal's aim is to be useful to both academics of tourism research and the practitioners of the tourism industry. Many of the papers published in this journal have been presented at the various conferences sponsored by the Tourism, Leisure & Recreation Unit of the Athens Institute for Education and Research (ATINER). All papers are subject to ATINER's Publication Ethical Policy and Statement. A journal publication might take from a minimum of six months up to one year to appear. All papers are subject to ATINER's Publication Ethical Policy and Statement.

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Athens Journal of Tourism
Editorial and Reviewers' Board

President's Message

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The current issue is the fourth of the tenth volume of the *Athens Journal of Tourism*, published by the Tourism, Leisure & Recreation Unit of ATINER.

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Gregory T. Papanikos
President
ATINER

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Athens Institute for Education and Research
A World Association of Academics and Researchers

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25-28 March 2024, Athens, Greece

The **Center for European & Mediterranean Affairs** organizes the **17ᵗʰ Annual International Conference on Mediterranean Studies, 25-28 March 2024, Athens, Greece** sponsored by the Athens Journal of Mediterranean Studies. The aim of the conference is to bring together academics and researchers from all areas of Mediterranean Studies, such as history, arts, archaeology, philosophy, culture, sociology, politics, international relations, economics, business, sports, environment and ecology, etc.You may participate as stream leader, presenter of one paper, chair a session or observer. Please submit a proposal using the form available (https://www.atiner.gr/2024/FORM-MDT.doc).

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- **Dr. Yannis Stivachtis**, Director, Center for European & Mediterranean Affairs and Associate Professor, Jean Monnet Chair & Director of International Studies Program, Virginia Tech – Virginia Polytechnic Institute & State University, USA.

Important Dates

- Abstract Submission: **28 November 2023**
- Submission of Paper: **26 February 2024**

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-

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A World Association of Academics and Researchers

20th Annual International Conference on Tourism
10-13 June 2024, Athens, Greece

The [Tourism, Leisure & Recreation Unit](https://www.atiner.gr) of ATINER organizes its **20th Annual International Conference on Tourism, 10-13 June 2024, Athens, Greece** sponsored by the [Athens Journal of Tourism](https://www.atiner.gr). The aim of the conference is to bring together academics and researchers from all areas of Tourism. You may participate as stream leader, presenter of one paper, chair a session or observer. Please submit a proposal using the form available (https://www.atiner.gr/2024/FORM-TOU.doc).

Important Dates
- Abstract Submission: **20 February 2023**
- Acceptance of Abstract: 4 Weeks after Submission
- Submission of Paper: **13 May 2024**

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- **Dr. Valia Kasimati,** Head, [Tourism, Leisure & Recreation Unit](https://www.atiner.gr), ATINER & Researcher, Department of Economic Analysis & Research, Central Bank of Greece, Greece.
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Slow Tourism Project to Redistribute Tourist Demand in Lazio: Cost-Benefit Analysis Using Monte Carlo Simulation

By Michele Angelaccio[*] & Ulviyya Hajiyeva[±]

This paper examines the potential financial advantages and disadvantages of a project called Feudo Turistico, which proposes the establishment of a slow tourism destination between Rome and Fiuggi. The objective of the project is to reduce the concentration of tourist demand in the city centers of Rome and Fiuggi and instead distribute it across the Lazio region by providing a local cultural and active tourism experience with new services that are currently unavailable in the region. To assess the project's feasibility, a cost-benefit analysis is conducted using Monte Carlo Simulation with 10,000 trials. This method allows for obtaining the net present value, internal rate of return, and discounted payback period for each simulated combination of input variables and then exploring the location and dispersion of these indicators. A simple random sampling technique is employed to simulate different sets of input parameters using a factor range between pessimistic and optimistic scenarios, where minimum and maximum values are determined based on existing literature, historical data in statistical reports of research institutions, and calculations derived from this data. Furthermore, two different settings are considered regarding the initial distribution of input parameters, and their outcomes are compared. The results and distribution of net present value, internal rate of return, and discounted payback period indicate that the Feudo Turistico project possesses a financially self-sufficient business model, generating cash flows that can repay the initial investment within a few years with a high probability.

Keywords: *slow tourism, cost-benefit analysis, discounted cash flow, Monte Carlo Simulation*

Introduction

In recent years slow tourism is becoming a trending phenomenon in the tourism industry. It originated with the Slow Food and Cittaslow movements in Italy in the late 1980s and encompassed the travel and tourism industry (Clancy 2018). It can be argued that slow tourism has emerged as a travel concept that caters to individuals seeking alternative experiences in their journeys, characterized by a deep respect for the environment and local communities (Staehle et al. 2012). According to Valls et al. (2019), spending more time in a single place to experience the local culture deeper, understand the local history better and taste local food more as well as reduce mobility and protect the ecological well-being

[*]Associate Professor, University of Rome "Tor Vergata". Italy.
[±]Graduate Student, University of Rome Tor Vergata, Italy.

are the main characteristics and objectives of slow tourism. Similarly, Dickinson and Lumsdon (2010) assert that the fundamental principles of slow tourism revolve around the notion of conducting activities at an appropriate pace and forging authentic connections with the destination. Furthermore, this concept encompasses a unique perspective on the natural environment, surpassing the superficial observation of landscapes and encouraging active engagement with all sensory aspects, thereby establishing a genuine bond with the place (Moira et al. 2017). That's to say, slow tourism aims to protect environmental well-being, preserve the socio-cultural richness and improve economic conditions in local communities; and these common goals ensure similarities in various practices (Fennell and Cooper 2020, Hall 2019, Machnik 2021, Qian et al. 2018, Weaver 2020).

In this regard, various types of practices, techniques and methods are implemented by various tourism businesses and destinations to achieve better environmental, social, and economic efficiency, and gain competitive advantages in the sustainable and slow tourism sectors. One example of these practices is offering products and services relevant to the local culture, geography, nature, climate, and the season of the year.

Following the above discussion, the present work offers a project intending to create a slow tourism region where it will be possible to provide users with experiential paths in terms of cultural tourism and active tourism in the Lazio region, between Rome and Fiuggi, and later performs cost-benefit analysis using Monte Carlo Simulation technique. In more detail, the present study analyses two non-exclusive options that have an as common purpose to contribute to the depolarization of tourist demand from the city centres of Rome and Fiuggi and redistribute it in the territory between the two poles, where tourism contributes little to local added value. We divided the territory into different touristic scenarios named "touristic feudos". This division and naming trace the origins of today's society and allow the visitors to immerse themself in the local culture and to take part in experiential paths that lead them to be active users and in the foreground both from a cultural and sporting point of view. In this regard, the project develops two feudos called Feudo Culturale and Feudo Attivo (Figure 1), which constitute the macro feud, called Feudo Turistico, together. The first Feudo aims to provide users with a contextualized account of the historical and artistic evolution of Lazio culture through the connection of some museums within a system, and an itinerary that links local cultures and experiences spread over the territory; the second Feudo connects sports practices in Lazio by the modernization of a Greenway to the required standards of safety and accessibility which allows practicing outdoor sports exploring the territorial context.

Figure 1. *Feudo Culturale (A) and Feudo Attivo (B)*
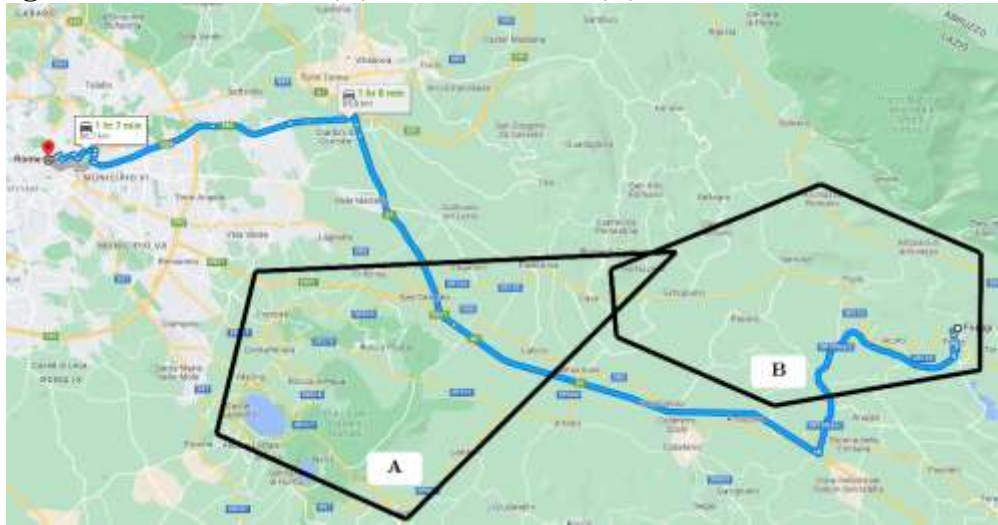
Source: Illustrated on Google Maps.

In more detail, the project seeks to establish a comprehensive museum network within the Cultural Feud, consisting of four museums. This network functions as a Strategic Network, catering to a homogeneous target audience and proposes coordination in terms of museum access by establishing appropriate links to manage the local cultural system and facilitate site accessibility. The museums included in the network are the Civic Archaeological Museum of Villa Ferrajoli, the Museum of the II Parthian Legion, Palazzo Chigi Ariccia, and the Velletri Diocesan Museum. These museums will be interconnected through a designated itinerary, which can be accessed from either Roma Termini station or Fiuggi, with the assistance of a shuttle service and tourist guides.

Furthermore, the project entails the redevelopment of the cycle path within the Active Feud, specifically the segment between Paliano and Fiuggi. The greenway follows the historical route of the former Rome-Fiuggi-Frosinone railway and is part of the Bicitalia and Eurovelo networks. Despite its relatively low visibility, the path is widely regarded as one of the most picturesque cycling routes in Lazio, offering a serene experience as it bypasses populated areas. The objective is to create a contemporary and user-friendly greenway that caters to potential users, incorporating new amenities. Importantly, the greenway is exclusively designated for non-motorized individuals, including pedestrians, cyclists, and horse riders, ensuring safety throughout its entirety. The project envisions modifying the terrain to accommodate horseback riders, employing a less rigid surface compared to conventional asphalt. The greenway provides a variety of itineraries that can be explored either with the guidance of tour operators or independently. To facilitate active tourism, the responsible social cooperative proposes the acquisition of e-bikes available for on-site rentals. This endeavor not only promotes active tourism but also generates revenue to sustain the greenway project itself.

The main objectives of the project are to generate growth in tourism demand within the two feudos. The direct beneficiaries of the project are tourists and some

resident inhabitants who are particularly interested in contact with nature or museum tours, while the indirect beneficiaries of the project are all accommodation and catering establishments that can enjoy growth in demand. Indeed, tourism plays a vital role in the development of different destinations around the world and culture is considered one of the key components of this development, as MacCannell (1993, as cited in Mousavi et al. 2016) argues "every form of tourism is a cultural experience." Similarly, the popularity of active tourism has been seen growing dramatically since the end of the eighties (Millington et al. 2001).

In summary, to achieve growth in demand, this project offers both cultural and active tourism as the components of slow tourism practices by expanding the local tourism offer through the provision of new services not currently available. It provides the visitors with a smart and guided approach to discovering the area between Rome and Fiuggi, with particular attention to the relationship between man and territory, as it has changed in the various historical periods that see these lands inhabited from prehistoric times to the nineteenth century.

The project proposes a financially self-sustainable business model that allows cash flows to be able to reach the break-even point in a few years. To do that, the present study performs a financial analysis referring to the evaluation of the investment, from the point of view of the crucial stakeholders. As a methodology, the financial and economic viability of the project has been assessed through a cost-benefit analysis (CBA) using Monte Carlo Simulation with the Discounted Cash Flows (DCF) method. Particularly, we referred to the document "Guide to the cost-benefit analysis of investment projects. Economic evaluation tool for cohesion policy 2014-2020", published by the European Commission, Directorate General for Regional and Urban Policy (2015). We analysed location and dispersion of net present values (NPV), internal rate of return (IRR) and discounted payback period (DPB) for the Feudo Turistico project using Monte Carlo Simulation with 10,000 trials. The inputs were obtained based on the existing and forecasted market factors from historical data, previous studies and calculations based on them. Two settings were constructed from which in the first one, it was assumed that input parameters have a normal distribution, while in the second, they are uniformly distributed. The results of the simulations provide a fairly high probability for positive NPV, considerably large mean value for IRR and acceptable average DPB in both cases.

A preliminary analysis has been introduced in the (Nardone 2018) in which a partial data set has been used to provide a benefit cost analysis.

The paper is organized as follows. Section 2 introduces the methodology used to assess the cost-benefit analysis for the project. Section 3 outlines the results of the analyses. Section 4 recaps the main findings and concludes the report.

Methodology

The present study investigates the cost and benefits of the Feudo Touristico project as well as its sub-projects of Feudo Attivo and Feudo Culturale using net present value (NPV), internal rate of return (IRR) and discounted payback period

(DPB) techniques. Furthermore, since the input values are not fixed, the Monte Carlo Simulation technique with a simple random sampling method was exploited to analyse the NPV, IRR and DPB. Monte Carlo is a computerized probability simulation method that concerns the influences of uncertainties in estimating models by calculating the outcomes using a random variable based on a range rather than a fixed value (Mooney 1997). It is a well-known technique used for a wide range of purposes including cost-benefit analysis (Gentilello et al. 2005, Loving et al. 2014, Mahdiyar et al. 2016).

NPV is one of the most sophisticated economic valuation methods for projects (Žižlavský 2014). This technique discounts all future cash inflows and outflows given a discount rate and sums them before deducting the initial investment amount as in the following equation (Khan 1999).

$$NPV = \sum_{t=1}^{n} \frac{NCF_t}{(1+r)^t} - I_0 \qquad (1)$$

where NCF_t is net cash flow during the period t, r is the real discount rate, t is the number of time periods, and I_0 is the total amount of initial investments.

IRR is a discount factor which equates the aggregated discounted cash inflows to the sum of discounted cash outflows (Promislow and Spring 1996). The present paper calculates this rate (r^*) according to the following formula (Di Lorenzo et al. 2012):

$$IRR = r^* \ni NPV(r^*) = 0 \qquad (2)$$

where r^* is the internal rate of return when the NPV of the projects becomes zero in Equation 1.

If there are significant uncertainties as in the case of the present study, the payback period (PB) – the time which is required to recover project cost, is usually suggested to assess the duration of the risky period of initial investment (Orioli and Gangi 2015). To consider the time value of money, this paper employs Discounted Payback Period (DPB) rather than a simple PB using the following equation:

$$DPB = t^* \ni NPV(t^*) = 0 \qquad (3)$$

where DPB is a payback period when the NPV equals zero.

In general, two scenarios were constructed. In the pessimistic scenario, the lowest possible revenues, highest possible costs and highest possible discount factor were employed, while the optimistic scenario was built using the highest possible income, lowest possible expenses and lowest possible discount rate. Later, Monte Carlo Simulation with 10,000 trials was run based on the cash flows calculated for each scenario. Moreover, we decided to construct two different settings for the distribution of the variables. In the first context, it was assumed that the variables have a normal distribution, while in the second, they are uniformly distributed. The lifespan of the project was defined as 10 years.

To summarize the following procedure was performed:
1. Input parameters for two (pessimistic and optimistic) scenarios were obtained from previous literature and historical data.
2. Cash flows were calculated for both scenarios.
3. Two different distribution functions were assigned for the input parameters (cash flows and discount factor).
4. A simple random sampling method was employed to simulate stochastic input parameters using an input range between pessimistic and optimistic scenarios.
5. Monte Carlo Simulation with 10,000 trials was performed to get 10,000 input combinations and corresponding solution matrix of NPV, IRR and DPB.
6. A statistical representation of NPV, IRR and DPB was examined after the simulations.

Input Parameters

The inputs which are used for this study vary and depend on various conditions and all these factors influence the final outputs. Therefore, it is important to accurately define the ranges for each variable to be used as inputs in simulations. The present study considers historical data in the statistical reports of reliable research institutes, self-calculations based on this data, and previous findings to identify the ranges for each factor.

Table 1 summarizes the inputs to calculate NPV, IRR and DPB for the project using the Monte Carlo Simulation. Minimum and maximum values for the discounting factor were identified following the recent literature for the project evaluation studies in Italy (Boggia et al. 2022, Coppola et al. 2020, Fioriti et al. 2022). Variable costs were defined as a percentage of total revenues; in which according to Frey and Meier (2006) and Plaza (2006), variable costs constitute a very low proportion of the total costs in similar projects including the operation of museums and other attractions. Regarding the staff, initially, 14 persons are employed in both scenarios while in an optimistic scenario, one new employee is going to be hired each year. The average salary for the project was calculated (rounded and increasing by 5% per year) based on the average salary for Italy which was €29,700 in 2021 (Trading Economics 2022). Other expenses were determined concerning the financial statements of similar projects and are assumed to increase by 5% each year. Taxes are not included.

Considering the inputs, forecasting demand is the main limitation of this paper. However, we tried to control this limitation by estimating demand based on average growth rates using the available data provided by national and regional statistical offices and service providers. We first found the number of visitors, and residents living in the surrounding areas, namely in the provinces of Frosinone, Latina and Rome (ISTAT 2022, UPI Lazio 2018), and then calculated average growth rates based on the available data. Later, we forecasted the number of visitors and residents in these provinces for 2024. Finally, some proportion of

these visitors and residents were assumed that will use the services of Feudo Culturale and Feudo Attivo (Appendix).

Table 1. *Input Parameters*

Input	Value (min)	Value (max)	Time Frame	Distribution	Reference
Discount Rate	2%	4%	Annual	ND / UD[*]	Fioriti et al. 2022, Boggia et al. 2022, Coppola et al. 2020
Variable Cost	8% of revenues	10% of revenues	Annual	ND / UD	Frey and Meier 2006, Plaza 2006
Average Salary	30,000	30,000	Annual	Constant	Trading Economics 2022
Number of Employees	14	14	Annual	Constant	
Advertising & Marketing	75,000	100,000	Annual	ND / UD	Based on the desk research using historical financial statements of similar projects
Maintenance Cost	60,000	120,000	Annual	ND / UD	
General and Adm. Cost	30,000	50,000	Annual	ND / UD	
Miscellaneous	30,000	40,000	Annual	ND / UD	
Extraordinary Maintenance	150,000	200,000	per 5 years	ND / UD	
Initial Investment	1,312,000	1,706,000	Uniform	ND / UD	
Tax					
Regional Tax (IRAP)	3.9%	3.9%	Annual	Constant	Agenzia Entrate (2023a)
Income Tax (IRES)	24%	24%	Annual	Constant	Agenzia Entrate (2023b)
Number of Visitors[**]					Appendix
Feudo Culturale	10,996	22,196	Annual	ND / UD	
Feudo Attivo					ISTAT (2022)
On foot	38,762	71,220	Annual	ND / UD	UPI Lazio (2018)
Bike rental	6,299	11,573	Annual	ND / UD	
Other services	3,392	6,232	Annual	ND / UD	
Price of the Services					
Feudo Culturale	€ 35	€ 35	per visitor	Constant	
Feudo Attivo					
On foot	€ 0	€ 0	per visitor	Constant	
Bike rental	€ 8	€ 8	per visitor	Constant	
Other services	€ 12	€ 12	per visitor	Constant	
Lifespan	10	10	10 years	Constant	

Notes:
[*]*ND:* Normal Distribution; *UD:* Uniform Distribution.
[**]*Optimistic Scenario:* the number of visitors increases by 20% each year in the first 2 years, by 15% in the following 3 years, and later by 10% each year. *Pessimistic Scenario:* the number of visitors increases by 7% each year in the first 2 years, by 5% in the following 3 years, and later by 0% each year

Results

This section provides the results obtained through the implementation of the methods explained in Section 2 to the input parameters developed for the Feudo Turistico project. Before performing Monte Carlo Simulation, net present value, internal rate of return and the discounted payback period were calculated for optimistic and pessimistic scenarios (Table 2). In the positive scenario, values obtained for NPV (€5.38 million), and IRR (37.24%) is considerably high, and the payback period is notably short (around 3 years and 7 days). In the second scenario, a large amount of loss (NPV = -€4.96 million) is expected, while IRR and DPB cannot be obtained since no positive cash flow is observed.

Table 2. *Profitability of the Project with Optimistic and Pessimistic Scenarios*

Indicator	Optimistic Scenario	Pessimistic Scenario
NPV	€5,378,928	-€3,651,581
IRR	37.24%	-
DPB	3.02	-

Later, one simulation was performed for each different random combination of input parameters using the input space with 10,000 simulations. This process was conducted separately for the settings when the variables are normally distributed and when they are uniformly distributed. Consequently, we obtained 10,000 NPV, IRR and DPB for each case.

Table 3 outlines the potential financial benefits and drawbacks of the project. In the first setting with normally distributed variables, the probability of a positive net present value is 62.01% (1-37.99%), while it is even higher (76.94%) in the second context. So, in both cases, the probability of profit is around twice as high as the probability of loss. The probability of a negative internal rate of return was also reported since a negative IRR is obtained when the sum of the nominal cash flows is less than the initial amount invested for a project, meaning that it is a sign of a negative return on investment (Kuchta 2000). The results provide that the aggregated value of nominal cash flows is higher than the initial investment in 85.81% (1-14.19%) of 10,000 simulations when the inputs are normally distributed, while this probability is 87.84% (1-12.16%) when the factors have a uniform distribution. For discounted payback period, 5 years and less was defined as a period with a financial advantage. The probability of financially advantageous DPB is 35.87% (1-64.13%) in the first setting, while it is considerably low (2.58% = 1 - 97.42%) in the second one.

Table 3. *Probability of Financial Disadvantages with Monte Carlo Simulation with 10,000 Trials*

Indicator	Normal Distribution	Uniform Distribution
Probability ($NPV < 0$)	37.99%	23.06%
Probability ($IRR < 0$)	14.19%	12.16%
Probability ($DPB > 5$)	64.13%	97.42%

To have a better understanding of the quality of representation, Table 4 outlines the summary statistics with seven moments of the distribution illustrating the location and dispersion of NPV, IRR and DPB after 10,000 simulations. The average value of NPV is around €590,811 with a high variance when the variables have a normal distribution. The minimum net present value of the project is €7.07 million in loss, while its maximum value can be up to €7.87 million in profit. The median value is just €15,012 higher than the mean and the skewness is -0.05 which indicates that the distribution of NPV is fairly symmetrical with very modest left skewness. At the same time, kurtosis is 0.06 meaning that the net present values of the project with 10,000 trials have very light tails with a lack of outliers.

Table 4. *Outcomes of Monte Carlo Simulation with 10,000 Trials*

Indicator	Normal Distribution			Uniform Distribution		
	NPV	IRR	DPB	NPV	IRR	DPB
Mean	€590,811	0.12	5.55	€590,799	0.08	8.46
Standard Deviation	€1,982,110	0.13	3.19	€798,365	0.07	3.00
Median	€605,823	0.12	5.78	€596,018	0.08	7.86
Minimum	-€7,070,383	-0.55	-15.57	-€2,100,787	-0.37	-29.82
Maximum	€7,874,200	0.89	25.03	€3,321,108	0.28	42.54
Skewness	-0.05	-0.06	-0.99	-0.01	-0.86	0.79
Kurtosis	0.06	1.02	3.47	-0.14	1.82	12.53

Considering the internal rate of return, the mean value is 12% (with a high standard deviation), notably larger than the discount factors found in pertinent literature for Italy. A higher value of IRR implies that the project looks profitable (Dorfman 1981). As NPV, IRR has also a median value (12%) close to the mean with very small skewness (-0.06), and kurtosis (1.02). On the other hand, the discounted payback period has less symmetry with a moderate left skewness (-0.99) and heavier tail (kurtosis = 3.47) compared to NPV and IRR. The average DPB is about 5 years, 6 months and 18 days, while the median is around 5 years, 9 months and 11 days.

The location and dispersion of NPV, IRR and DPB when the input parameters have a normal distribution as interpreted above can be also seen visually in Figure 2 where the distribution and density of outcomes are demonstrated in the box plot, histogram, kernel density and the cumulative distribution plots.

Considering the simulation setting when the input parameters have a uniform distribution, the most probable NPV (€590,799) is almost the same as the mean NPV in the previous setting. However, maximum loss and maximum profit have notably lower values (respectively €2.10 million and €3.32 million) compared to the results obtained when the factors are normally distributed. Taking look into the symmetry and "tailedness" of the distribution of net present values, even though we observe the slightly weaker sign of asymmetry and larger tail in comparison with the prior case, still it has a sufficiently symmetrical normal distribution with a bell-shaped curve (Figure 3).

Similarly, the internal rate of return also has a significantly lower mean (0.08), standard deviation (0.7), median (0.08), minimum (-0.37; lower in absolute

value) and maximum (0.28) values, and kurtosis (1.82) as well compared to the previous scenario. An important difference is in symmetry in which skewness equals -0.86 depicting a moderate left skewness of the distribution.

Figure 2. *Box Plot (left), Histogram and Kernel Density (centre) and Cumulative Distribution (right) of the Project NPV, IRR and DPB having Normally Distributed Input Parameters (First Setting) with 10,000 Times MC Simulation*
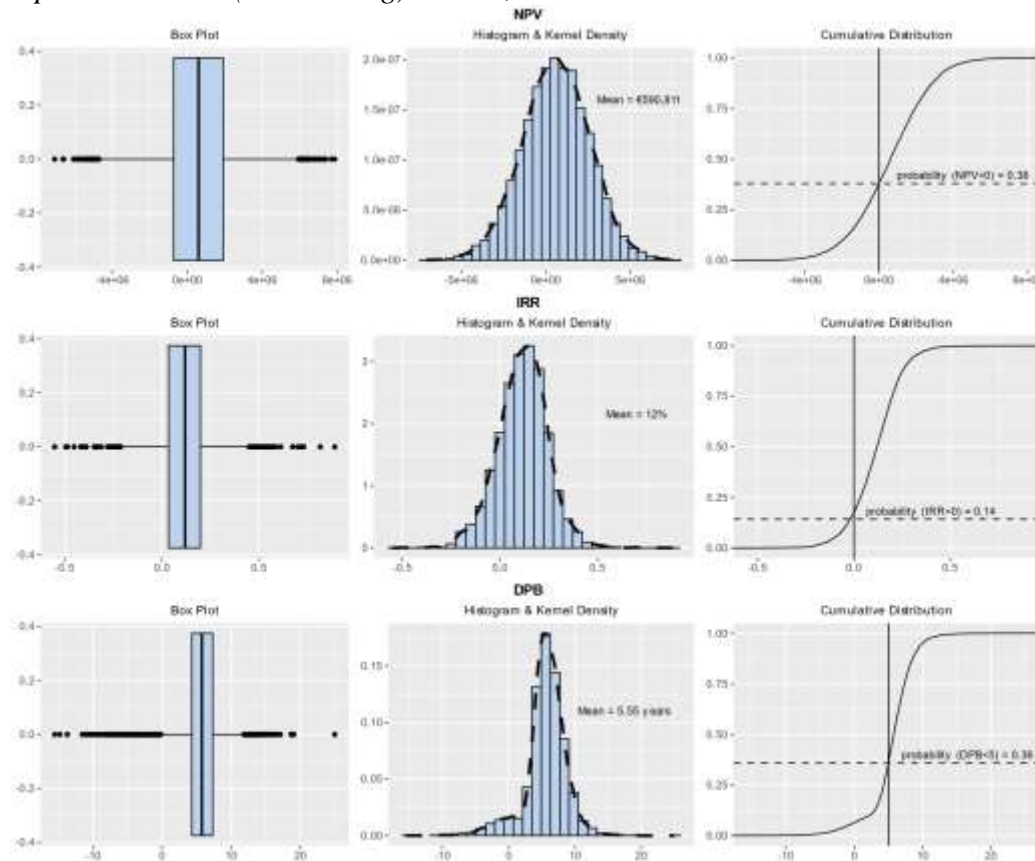
The main contradiction between the two cases was detected in the discounted payback periods. The average DPB is about 8 years, 5 months and 16 days when the input parameters are uniformly distributed, and the median is around 7 years, 10 months and 10 days lower than the mean, unlike the other case. The asymmetry is a bit high with a moderate right skewness; however, the distribution of the outcomes is affected by a strong leptokurtosis, greater than 12. It assigns a greater probability to events very far from the mean value of the distribution than the probabilities that would be assigned to such events by a normal distribution (Adams and Thornton 2013). So, the DPB has a distribution with fat tails meaning that high fluctuations away from the mean are expected for the payback period. This effect as well as other interpretations for the outcomes obtained with input parameters with uniform distribution can also be observed in Figure 3.

To summarize, from the economical perspective the expected financial outcomes are almost the same when the input parameters are normally distributed in comparison with the setting when the factors have a uniform distribution.

However, the risk assessment is more controversial as on one hand, the probability of loss is higher in the first setting; on the other hand, asymmetry and "tailedness" is larger in the second one.

Figure 3. *Box Plot (left), Histogram and Kernel Density (centre) and Cumulative Distribution (right) of the Project NPV, IRR and DPB having Uniformly Distributed Input Parameters (Second Setting) with 10,000 Times MC Simulation*
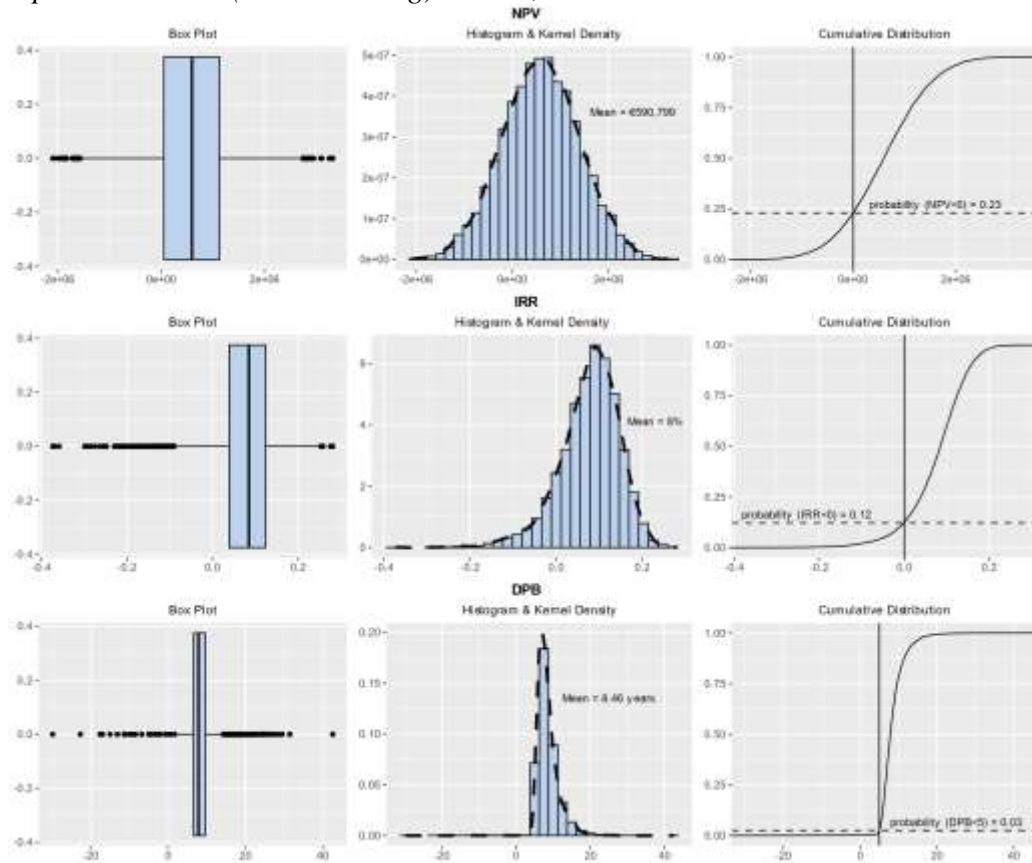
Conclusions

This research paper presents a project proposal that aims to establish a slow tourism region by offering experiential pathways in cultural and active tourism. The project seeks to expand the tourism offerings in the Lazio region by introducing new services that are currently not available. The main objective is to alleviate the concentration of tourist demand in the city centers of Rome and Fiuggi and redistribute it across the territory between these two poles. The project includes the development of two touristic feuds: Feudo Culturale, which focuses on providing a touristic experience centered around the historical and artistic evolution of Lazio's culture, and Feudo Attivo, which aims to enhance outdoor tourism experiences through the modernization of a Greenway. These two projects collectively form the macro feud known as Feudo Turistico.

To assess the financial viability of the Feudo Turistico project, a cost-benefit analysis is conducted using the Monte Carlo Simulation method. Two scenarios are considered: an optimistic scenario utilizing the best possible input parameters and a pessimistic scenario using the worst possible input parameters to calculate discounted cash flows over a ten-year period. Additionally, 10,000 combinations of stochastic input parameters are simulated using a simple random sampling method within the range defined by the optimistic and pessimistic scenarios. Furthermore, two simulation settings are implemented in which, the first assumes input parameters are normally distributed, while the second assumes they have uniform distribution. Each distribution scenario is performed with 10,000 trials of Monte Carlo Simulation for ten years, and the outcomes are compared.

The results reveal that the project yields a positive net present value (NPV), an internal rate of return (IRR) that exceeds the discount factor, and a relatively short payback period in the optimistic scenario. However, the pessimistic scenario results in a negative NPV over the ten-year period. Therefore, the Monte Carlo Simulation provides a more reliable understanding of the financial outcomes due to its alignment with the law of large numbers (Metropolis and Ulam 1949). In the scenario with normally distributed input parameters, the expected average return is approximately €0.6 million, the mean internal rate of return was 12%, and the discounted payback period is approximately 5 years and 7 months. In the scenario with uniformly distributed factors, the NPV remained almost the same, while the IRR decreased significantly (8%) and the DPB increased to approximately 8 years and 5.5 months. However, all indicators except for DPB exhibited a fairly symmetrical distribution in both settings. The probability of achieving a positive NPV and IRR is high in both scenarios.

Considering the results and the distribution of net present value, internal rate of return, and discounted payback period, it can be argued that the project possesses a financially self-sustainable business model capable of generating cash flows that can repay the initial investment within a few years.

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Appendix

Table A1. *Number of Visitors*

Provinces	Number of Visitors	Average Annual Variation (%)	2024 (forecast)	Potential Visitors (%)		Effective Users		
				min	max	% of P.V.	min	max
Feudo Attivo								
Visitors								
Frosinone (2017)	435,649	0.18	441,155	10	15	20	8,823	13,235
Latina (2017)	522,736	-5.99	339,179	4	7	20	2,713	4,749
Rome (2019)	11,416,314	4.48	14,215,150	1	2	20	28,430	56,861
Residents								
Frosinone (2021)	468,438	-1.24	451,227	8	12	20	7,220	10,829
Latina (2021)	565,840	-0.54	556,723	4	8	2	445	891
Rome (2021)	4,222,631	-0.96	4,102,183	1	3	2	820	2,461
Feudo Culturale								
Visitors								
Frosinone (2017)	435,649	0.18	441,155	5	10	6	1,323	2,647
Latina (2017)	522,736	-5.99	339,179	3	5	6	611	1,018
Rome (2019)	11,416,314	4.48	14,215,150	1.5	2.5	6	12,794	21,323
Residents								
Frosinone (2021)	468,438	-1.24	451,227	3	6	2	271	541
Latina (2021)	565,840	-0.54	556,723	1	2	2	111	223
Rome (2021)	4,222,631	-0.96	4,102,183	0.5	1	2	410	820

Source: ISTAT 2022, UPI Lazio 2018.

The Design of Tourism Policies Adjusted to High Potential Destinations: A Methodology for the Creation of a Green Paper Inspired by the Cávado and the Ave (Portugal)

By Danielle Pimentel-de-Oliveira[*]

Public policies regarding the development of sustainable tourism continue to evolve within the European Union. With the changes in tourist trends post-COVID-19, some destinations have initiated certain processes of tourism expansion. These processes must be accompanied by tourism policies tailored to their specific territories. This necessitates a more territorial vision that is aligned with the needs of the local population and in harmony with the four dimensions of sustainability (economic, social, environmental, and institutional). The present research is inspired by the increase in tourist arrivals, observed in the promising destination of the Northern Region of Portugal since 2015, to present a theoretical proposal that has the participation of the local population of tourist destinations, through a literature review, on-site observations and interviews with local agents. The objective is to propose and develop a methodology based on the technique of a Green Paper, a tool for collective intelligence and a preliminary step for the analysis and creation of tourism policies. It is expected to increase confidence in the institutions that manage tourism activity, sustainable reactivation of the economy, resident satisfaction, empowerment and stronger links between local actors and the administration of the destinations.

Keywords: *green paper, tourism policies, governance, local participation, sustainable tourism, fourth dimension of sustainability, high potential destinations*

Introduction

From the 1950s onwards, tourism began to be considered one of the most thriving economic activities in Europe, offering great economic advantages that boosted business, international exchanges and opportunities within and outside the tourism sector (Jafari 1994).

The substantial evolution of the sector from the 1960s led to the development of tourism policies at the local, regional, and national levels. These policies aimed to establish a framework for regulating the sector, which was still in the process of development at the European and global levels, while also prioritizing the maintenance of Sustainable Tourism.

Since the 1980s, significant changes and transformations have been observed in public management processes, driven by the evolving cultural, economic, social, and environmental context of humanity (Fayos-Solá et al. 2012). These changes encompass both structural and conjunctural dimensions.

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[*]Researcher, University of Valencia, Spain.

From a structural perspective, these transformations align with the guidelines of the EU. Starting from the 1990s, tourism gained greater prominence on the political scale with the publication of the document 'The Role of the Union in Tourism: Green Paper of the Commission' (Commission of the European Communities 1995). This document not only encourages reflection on the European Union's role in the activity but also calls upon interested parties to collaborate (EUR-Lex 2012).

From a more pragmatic conjunctural perspective, the evolution of tourism and its sometimes uncontrolled impacts on social, economic, and environmental contexts have compelled administrations to develop mechanisms for monitoring, regulating, and managing the sector. However, these mechanisms have not always fulfilled their mission, often neglecting the needs of the local population, who are the true stakeholders in the tourist structure of the destination.

These two dimensions, structural and conjunctural, have given rise to structures and instruments that now play a crucial role in supporting the development of tourism management policies (Fayos-Solá et al. 2012).

In line with EU guidelines (Commission of the European Communities 1995), several studies (Lamont et al. 2021, Rozite et al. 2020, Navarro-Jurado et al. 2019, Boukas and Ziakas 2016, Brendehaug et al. 2016, Rodríguez et al. 2014) suggest adopting bottom-up management and organizational strategies to develop tourism policies tailored to the local idiosyncrasies. This approach involves the local population in creating governance systems that align tourist expectations with the needs of the resident community.

Notably, the use of governance-based approaches to design tourism policies is an underdeveloped area in scientific research, as observed through databases like the Web of Science (WoS).

From a broader perspective, tourism activity has been shaping up as an enhancer of the territorial resources of destinations, whether cultural or natural (Cànoves et al. 2017). In this sense, tourism activity has been favouring the economic and social development of territories distant from first-class tourist destinations (Hinojosa 2020, Vera-Rebollo and Ivars-Baidal 2020, Muñoz Mazón et al. 2012). This push, 'to the authentic', has been accentuated by the COVID-19 health crisis, which opened up new perspectives for tourists and visitors who follow the trend of searching for spaces far from touristified environments, with personalized and unique experiences, in line with the idea of a more sustainable tourism (Pimentel de Oliveira 2020). This reinforces the need to design tourism policies that are more in line with the current reality and the perspectives of territories that present a promising tourism future (Fana et al. 2020, Pimentel de Oliveira 2022).

The scientific literature, as discussed in the following sections, emphasizes the importance of systematization in creating effective tourism policies. This includes providing content and implementing control and monitoring mechanisms, along with designing bottom-up strategies.

Given the above, this research aims to develop a theoretical proposal supported by the technique of a Green Paper, serving as a tool for collective intelligence and a preliminary step for the analysis and creation of tourism

policies, as recommended by the Commission of the European Communities (1995).

Although White Papers on Tourism have been implemented at the regional level in Europe since the 1990s, Green Papers, as documents for collective reflection, are less common at the local level, making this study potentially innovative.

The proposal is based on the four dimensions of sustainability: social, economic, environmental, and institutional, which have been utilized by many researchers (Obradović et al. 2021, Lee and Jan 2019, Pulido-Fernández et al. 2011, Stuart et al. 2007). It adapts to the needs of tourist destinations that have an attractive tourist future, designing a green book, and adjusting to the territory.

To ensure a more territorial contribution, this research focuses on the reality of destinations in the northern region of Portugal, drawing inspiration from the territories of Cávado and Ave. The selection of these territories is not arbitrary, as recent data from INE - Portugal (2022) indicate a positive evolution in recent years, particularly in the tourism sector (Vidal 2022). Additionally, there has been significant growth in the flow of visitors, as stated by the 'President of Tourism Porto e Norte, Luís Pedro Martins (Publituris 2022). This increase in tourism flow in such a particular environment, such as the Northern Regions of Portugal, requires tourism policies adjusted to their needs and local idiosyncrasies.

In the subsequent sections of the research, an overview of European Union documents, such as Green Papers and White Papers, is presented, along with their development into a Tourism Policy Plan. The literature review and theoretical proposal will incorporate citizen participation as a primary focus, integrating it into the process of developing tourism policies tailored to the territories. Citizen involvement will manifest in two ways: through direct participation in the methodology's development and through personalized, semi-structured interviews with various stakeholders of the destination (Kallio et al. 2016, Komppula 2014).

Literature Review

Tourism Policy and Local Residents

Since the nineteenth century, certain voices in the political and economic sphere began to recognize tourism as a potential tool capable of contributing to the economies of countries. This vision was also shared by the political environment in Portugal, which viewed tourism as a suitable instrument to address its critical economic situation (Cunha 2012).

Building on this premise, some scientific studies directed their theoretical frameworks towards supporting the development of methodologies for designing tourism policies that demonstrate effective management and planning of the industry.

In this context, Fonseca (1936) proposed a methodology divided into three steps to assess and incorporate the tourism industry. Firstly, the author advocated considering the existing artistic value, such as its tourist appeal (as capital).

Second, evaluate the returns this value can generate. Finally, organizing the efforts to achieve the expected results, thus establishing the principles of a tourism development strategy. Carlos and Santos (2015), noted that this vision was predominantly focused on economic aspects, viewing tourism as a mere industry.

From the perspective of tourism policies, they should aim to minimize adverse sociocultural and environmental impacts associated with tourism development. Spencer (2010) suggests involving the local population through mechanisms like tourism advisory committees, public hearings, or satisfaction surveys. This methodology is widely supported by studies conducted by Nunkoo and Ramkissoon (2011).

Another more integrative vision, focusing on social, economic, structural, and political aspects, is presented in the three-step methodology: Diagnosis of environments; Knowledge of available instruments, and governance applied to tourism (Fayos-Solá et al. 2012).

Lamont et al. (2021), use 'participant-governed networks' techniques as an instructive framework to examine the role of community-driven grassroots networks in shaping tourism and leisure public policy. This methodology was also approved by Provan and Kenis (2008) and studied by Lin and Simmons (2017).

All these proposals aim to encourage a conscious reconsideration of tourism, as highlighted by Huete et al. (2008), emphasizing the importance of research that analyses the impacts of the activity and its effects on residents' lives.

From this perspective, Harrill (2004) underscores the fusion of society with tourism within their territories, linking employment and land use with environmental and social aspects. Therefore, "the recognition of the needs of residents must be an integral part of all tourism planning processes" (Pimentel de Oliveira 2022, p. 252). This perspective creates a virtuous circle, where local population support leads to a more favourable reception of tourism by the residents themselves, who become integral actors in the tourist experience of the destination.

In this regard, some scientific studies (Nunkoo and Ramkissoon 2011, Gursoy et al. 2009, Huete et al. 2008, Allen et al. 1993) assert that the local population is more likely to support tourism activity if the positive impacts outweigh the negative consequences. The best strategy to achieve this balance is through the implementation of Bottom-Up policies, which allow the local population access to participation and decision-making processes.

By adopting this participatory approach, authorities grant citizens a crucial role in the development process, "enabling them to have a say in interventions that affect them and over which they previously had limited influence or control" (Kothari and Cooke 2001, p. 5). According to Grzeskowiak et al. (2003), this empowerment of residents is pivotal for the overall satisfaction of the community.

In summary, it is only through the redesign of tourism policies, considering the needs and satisfaction of the local society, that the tourism sector can effectively manage the activity. This approach involves implementing a planning strategy that aligns with the characteristics of the territory, respects its resources and its population, and aims to establish truly sustainable tourism.

In general, for the formulation of tourism policies, the European Union (European Commission 2020) recommends adopting a comprehensive and

standardized three-step methodology: Green Paper, White Paper, and Tourism Policies. Therefore, this research constitutes the initial phase of these three steps, presenting a proposal for a Green Paper with an innovative application specifically, from a local perspective, tailored to the idiosyncrasies of promising spaces, such as the Cávado and Ave, in the North Region of Portugal.

EU Books

Green Paper

According to the glossary of the European Union (European Commission 2020), 'Green Books' are documents published by the European Commission that aim to stimulate reflection at the European level on specific issues or topics. These books seek to engage institutional entities as well as local actors in a participatory process of consultation and debate on proposals related to a specific topic.

In this context, a 'Green Book on Tourism' is associated with the concept of collective intelligence (Pimentel de Oliveira 2022) within a tourist destination, be it a locality, region, or country. It facilitates the process of analysing, contrasting, and integrating the knowledge of the destination under study from the various perspectives of the stakeholders within the territory. It is the outcome of reflection, consultation, and debate among the destination's stakeholders, aimed at analysing its structure and operation while also fostering participatory processes related to tourism activity, although it does not provide specific recommendations (Fayos-Solá et al. 2012). Its purpose is to define how the tourism system, its operators, and interest groups function, as well as each of the subsystems. This is achieved through methodological techniques such as meetings involving experts in the economic, social, and environmental fields, interviews with them, workshops, SWOT analysis, and/or PEST analysis.

In essence, it provides a consistent conceptual framework and a platform for identifying the actors within the tourism system, and their roles and responsibilities, while also serving as the starting point for a participatory process. In summary, it reflects the image of the destination and its approach to the tourism sector.

The Green Paper represents the initial phase in the development of tourism policies, serving as the precursor to legislative processes leading to a subsequent document called the 'White Paper.' The White Paper, in turn, lays the foundation for the formulation of specific tourism policies, which, in this case, are tailored to the needs of the analysed territory.

White Paper

The 'White Paper' serves as an analytical and institutional guidance tool, particularly in the context of tourism. It operates as a forward-looking instrument, offering solutions to existing challenges within the tourism sector within a specific locality, region, or country.

Its premise begins with the participatory evaluation process, which began previously with the 'Green Book', under the auspices of different local actors.

In essence, a 'White Paper on Tourism' should have the capacity to define strategies, objectives, and actions tailored to each of the stakeholders in the

process. Thus, it represents the second stage in the development of the 'Tourism Policy Plan' (Fayos-Solá et al. 2012).

Tourism Policy Plan

The need for a well-structured tourism policy has become increasingly evident in recent decades, and this need has been further emphasized following the COVID-19 health crisis. Both public and institutional agencies, as well as the private sector, have recognized the importance of establishing robust institutional frameworks to ensure the sustainability of tourism activities at the sectoral level (Edgell et al. 2013, Fayos-Sola and Alvarez 2014).

The Tourism Policy Plan should be built upon the results obtained in previous documents of analysis and political guidance that facilitate decision-making, such as the 'Green Paper' and the 'White Paper,' as explained earlier.

A Tourism Policy Plan encompasses a series of programs, subprograms, and agreed-upon actions, which are developed collaboratively by public administrations, the private sector, and civil society. Its purpose is to design strategies and achieve objectives related to various aspects of the tourism sector in a destination, including analysis, communication, promotion, distribution, service provision, excellence, and result evaluation (Fayos-Solá et al. 2012).

A Tourism Policy Plan should have the capacity to outline the different components of the governance process. In essence, it serves as the framework examined from the perspective of utilizing tourism as a development tool, considering both human and social capital and participatory governance systems within the destination.

Tourism in the Northern Region of Portugal

According to the Portuguese Tourism Statistics Report (INE-Portugal 2020), tourism has experienced significant growth in the country in recent years, with approximately 24.6 million tourist arrivals in 2019. This represents a 7.9% increase from the previous year, positioning Portugal as the 5th country with the highest surplus (13,100 million euros) in the European tourism balance.

In this context, Portuguese tradition and culture, together with the post-COVID-19 trend that is linked to the search for destinations away from mass tourism, with experiences closer to local autochthony (Pimentel de Oliveira et al. 2022, Remoaldo 2020, Vargas Sánchez 2020, Sintes González 2020, Padrón Fumero and Hernández Martín 2020, Vera-Rebollo and Ivars-Baidal 2020, Couret 2020, among others), are configured as important attractions for tourism in general.

According to Lopes et al. (2018), the region known as the 'Região Norte de Portugal' has become an area where tourism has gained increasing importance in recent years, attracting a growing number of tourists and contributing significantly to economic production. Confirming this trend, the latest annual bulletin from INE-Portugal (2023) reports that all regions of Portugal are expected to see an increase in tourist arrivals in 2022. The Northern Region is positioned as the third region with the highest growth rate, at over 86.6%, compared to the previous year,

ranking just behind Lisbon (121%) and Madeira (90.9%). Consequently, it is emphasized that "the region is expected to play a prominent role in competitiveness through strategic planning that leverages its potential". However, Lopes et al. (2018, p. 2) also express concerns about the heterogeneous nature of tourism development in the region.

In light of these observations, the development of a Tourism Policy Plan tailored to the destination's specific needs would serve as an invaluable management tool.

Regarding the territory, the Cávado and Ave (the territories forming the basis for the methodological development of this research), located in the North of Portugal, consist of 13 municipalities or "Concelhos" (see Figure 1).

Figure 1. *Cávado and Ave - NUTS III North of Portugal*
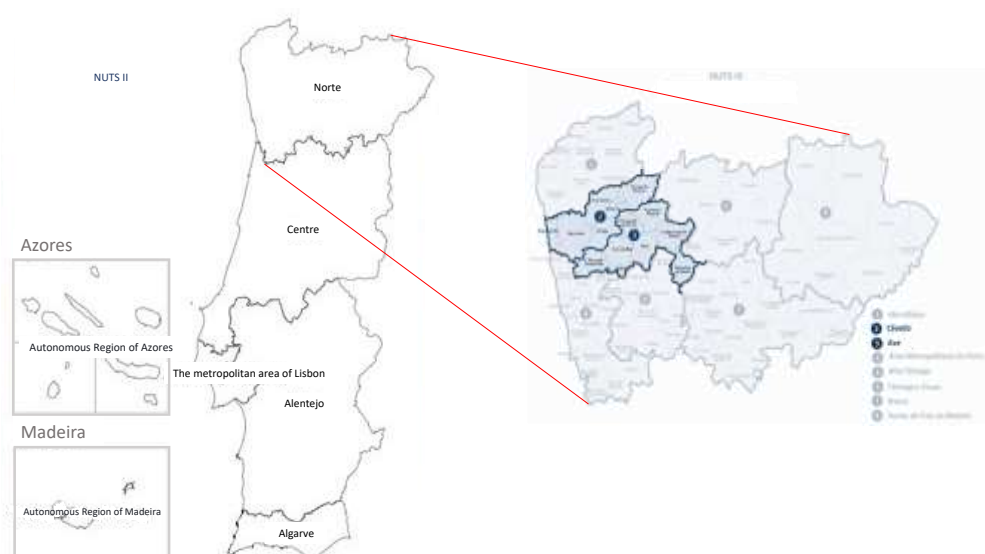
Source: Own elaboration based on data from PORDATA (2009) and Comissão de Coordenação e Desenvolvimento Regional do Norte (2022).

Both spaces are characterized as emerging destinations, presenting a tourism composed of a local culture based on gastronomic, artisanal and social traditions, as well as a unique preserved nature.

The Territories of the Cávado and the Ave

Currently, the wide offer of tourist destinations, as well as the variety of markets, is according to Mendola and Volo (2016), one of the major concerns of emerging destinations. An observation that is seen by Lopes et al. (2018), as a limiting characteristic of the development of measures in similar and neighbouring regional destinations. Therefore, the methodologies implemented in these destinations must be clearly defined, as there is significant competition at both regional and local levels.

Both destinations, Cávado and Ave, present products capable of promoting tourism growth in the short term, such as City Break, Touring and Nature Tourism, as well as other more structured products such as health and wellness tourism,

interesting gastronomic tourism and innovative meetings and conference tourism, among other notable products.

These are territories that knew how to make use of the various classifications of "World Heritage Sites" by UNESCO to restore urban, historical and natural areas with great tourism potential. Broadly speaking, they are defined by three basic singularities: openness to the outside world, a solid tradition and experience in international trade. In addition, they have entrepreneurial and industrial characteristics as well as the consideration of significantly safe regions (Northern Regional Coordination and Development Commission 2023).

In this sense, the destinations that make up the Cávado and the Ave can be configured as vectors of territorial, social, economic and environmental development, if the design of their public policies goes through participatory processes, where the need of local actors is observed and the expectation of the visitor is fulfilled.

Sustainable tourism cannot be only related to endogenous characteristics, such as availability of access to resources, employment opportunities and access to public services (Dal Bello et al. 2022), but must also have a network articulated based on public policies and good governance. For this reason, it must contemplate a triple awareness: the economic weight of tourism in the region, governance (understood as the participation of the population in decision-making) and the correct balance between tourism, visitors and heritage, whether natural or cultural.

Methodology

This research has used the review of scientific articles from the Web of Science database, a database that allows access to publications in all fields of knowledge with a high-quality index, also with significant scientific rigour and a high level of demand (Garrigos-Simon et al. 2018, Merigó and Yang 2017). Scientific articles from other search engines were also used, although by snowballing from the articles initially searched in WOS.

Based on the analysis of the reviewed articles, a methodology is proposed as a foundation for the development of tourism policies, aligning with the creation of the 'Green Book' of the EU. This methodology places a strong emphasis on tourism sustainability and processes of citizen participation tailored to the specific needs of territories such as the Cávado and Ave in the Northern Region of Portugal.

Furthermore, personalized semi-structured interviews were conducted with various local actors, following the methodologies observed in studies by Kallio et al. (2016) and Komppula (2014).

Theoretical Proposal: A Green Paper for Sustainable Tourism

For the development of a tourism policy plan, the participation of all stakeholders involved in the destination is crucial (Fayos-Solá et al. 2012). By

using sustainability as a foundational principle, this technique is based on the four dimensions of sustainable development supported by various authors across different fields of study (Sustainable Development 2023, Pimentel de Oliveira 2021, Carro Suárez et al. 2019, Rosano Ortega et al. 2019, Beatriz et al. 2018, Spangenberg 2002, Commission on Sustainable Development 2001, Valentin and Spangenberg 2000). This proposal operates under the premise that fully satisfying the economic, social, and environmental dimensions necessitates an institutional framework that promotes the coordination and development of regulatory frameworks, as well as alliances among various stakeholders to enable their advancement.

Recognizing that tourism should not disrupt the communities hosting it in their territories, tourism activity inevitably shapes perceptions and utilization of cultural, social, and economic spaces (Vidal 2021). This transformation can only occur through the integration of all involved actors. Therefore, the first step of this theoretical proposal, following the approach of a 'Green Book,' centres on the identification of tourist interest groups through a comprehensive analysis.

Phase 1: Identification of Actors

Stakeholders should ideally represent a broad spectrum of interests, encompassing the needs of various actors from the public, private, and civil society sectors. To identify these interests, personal interviews, workshops, opinion forums, and questionnaires can be employed. These techniques should delve into aspects related to the perception of tourism development and the levels of commitment to the activity's progress.

Moreover, it is essential to map out a network of relationships among these actors to determine potential connections and alliances that can prove beneficial in addressing the future challenges of the activity within the destination.

Figure 2 illustrates the framework for the identification phase of actors, aligning with the four dimensions of sustainability (social, economic, environmental, and institutional).

After identifying the actors involved in the destination, the methodology progresses to Phase 2, focusing on the territory and the examination of attractions within the existing tourist offerings in the destination. This phase is tailored to the specific needs of this research, with a particular focus on the territories of Cávado and Ave as the septentrion.

Figure 2. *Phase 1 Identification of Actors*
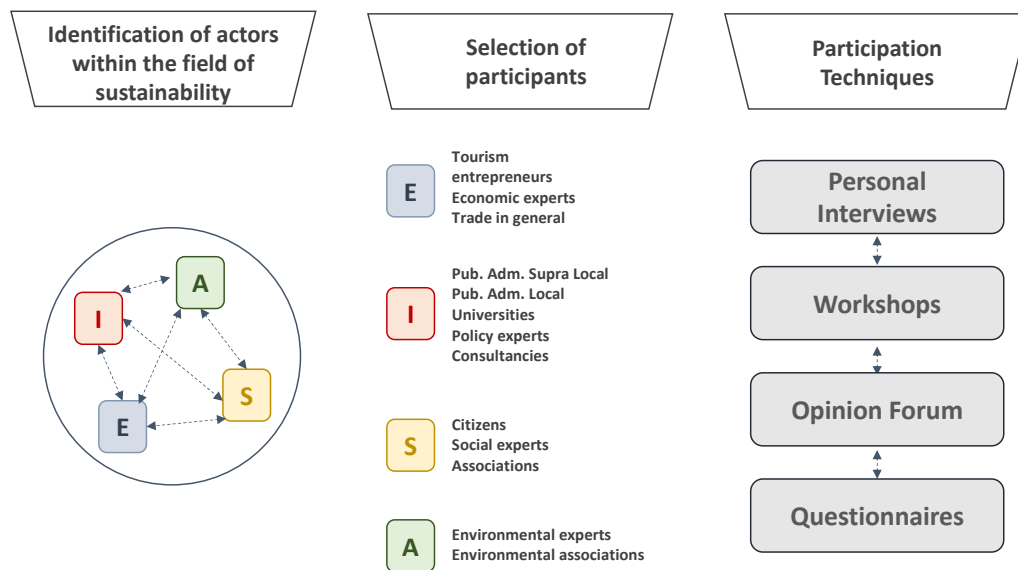
Phase 2: Determination of Supply

Tourism is closely intertwined with the geographical area it encompasses, making it dependent on environmental resources. These resources are directly linked to the sustainability of a tourist destination, necessitating social engagement to effect meaningful changes that contribute to improved tourism sustainability (Pimentel de Oliveira and Pitarch-Garrido 2022). In this context, it is not only important to consider what attractions a destination possesses but also how effectively it utilizes its available resources.

In the determination of this second phase of the methodological proposal, a cataloguing of the tourist offer of the destination is carried out. This catalogue includes its tourist resources or attractions (monuments, heritage, landscapes, etc.) and its infrastructure (accommodations, transportation routes, restaurants, services, etc.).

This cataloguing process is guided by the four dimensions of sustainability mentioned earlier. Figure 3 illustrates the potential factors that may influence each of these dimensions, though it is not an exhaustive list:

Figure 3. *Factors for the Analysis of the Territory*

Source: Authors.

Determination of Demand

The aim of demand analysis is to address two fundamental questions: How many people desire what my destination offers? And among them, how many have the means to acquire it?

In essence, tourist demand for a destination represents the goods and services that are accessible and ready for purchase within a specified time frame and under specific conditions (Wu et al. 2017).

Based on the insights gained from these questions, it becomes possible to formulate tourism planning strategies that revolve around the existing products within the destination, tailored to meet the needs of the local population.

Common methodologies for assessing tourist demand include tracking the number of tourist arrivals and overnight stays (Guizzardi and Stacchini 2015, Baggio and Sainaghi 2016) and employing visitor questionnaires (Getz & Brown, 2006). However, there are additional techniques that can provide more precise insights into visitor behaviour, such as analysing tourist expenditures, employing the Frequency-Variable (Var) model, utilizing spatial econometric models, conducting panel data analysis, or even integrating Artificial Intelligence techniques like the Artificial Neural Network model (ANN) or the Approximate Set model (ASM), all of which have been outlined by Wu et al. (2017).

Once the destination's resources have been catalogued, and the type of demand for them has been determined, the next step involves conducting a SWOT analysis, which evaluates Weaknesses and Threats (external factors) and Strengths and Opportunities (internal factors), as well or, as a PEST analysis (examining Political, Economic, Social, and Technological aspects) related to the territory. With these components in hand, including the selected destination actors, supply/demand factors, SWOT and/or PEST analyses, the subsequent phase involves identifying potential connections and alliances between the actors and the

resources to be enhanced. This process highlights potential future challenges for tourism activity within the destination.

This dynamic approach enables the closure of a virtuous circle that aligns the destination's available resources with the active participation of local actors, resulting in a consensus rooted in the reality presented, as facilitated by the technique (refer to Figure 4).

Figure 4. *Circle of Consensus between Tourism and Destination Actors*
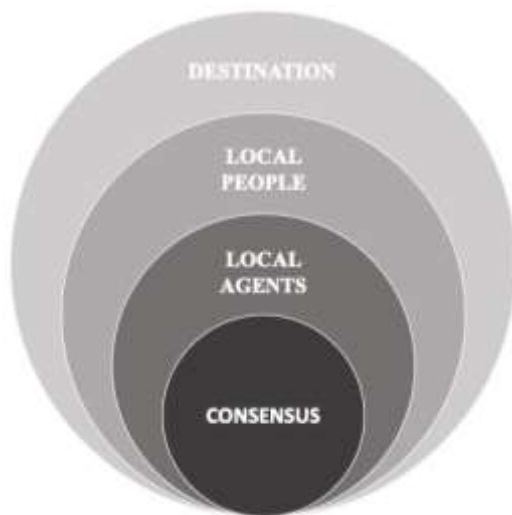
Source: Authors.

<u>Interviews with Local Actors</u>

As a complement to the research, reinforcing the importance of the participatory methodology, the present study conducted 16 personal interviews, combined with the use of the Zoom platform, when the face-to-face mode was not possible, with an approximate duration of 30 minutes to 1 hour each.

The interviews were carried out over a period that extended over 5 months, during the years 2022 and 2023, respecting the availability of the institutional agenda of some of the interviewees. The interviews have a semi-structured approach, and are aimed at different *stakeholders* of the destination (Kallio et al. 2016, Komppula 2014).

The selection of the interviewees, on the one hand, was made by observing the methodological criteria presented in this research. For this reason, they were framed in 4 dimensions of sustainability (social, economic, environmental and institutional). This contextualization allowed the interviewees to answer questions directly related to their expertise, providing greater depth to the theoretical proposal.

On the other hand, the interviews have been directed to local actors and agents of change in both regions in question, as indicated above and observed in Figure 5.

Figure 5. *Actors Selected and Main Criteria for Interviews*

Dimension	*Nº*	*Actors*	*Main criterion*
Social	5	• Craftsmen • Associations • Academic Experts • Public Offices	• Artisans: Cobres Cunha (J.C.F.), an artisan trade that has the tradition of six generations of the family, proximity to tourist areas of greater pressure; • Association of 'Galo de Barcelos' (A.P.), representative of the collective of artisans; • Academic expert in regional culture and Portuguese traditions (F. J. B. G.); • Councillor for the social area at Guimarães City Council (P.C.S.O.); • Director of the Museum: 'Museu de Olaria de Barcelos' (M.C.C.M).
Economic	4	• Merchants • Entrepreneurs • Associations	• Trade in traditional bulk products (S.F.), relevance of its trade in the tourism environment and level of sustainability; • Flower Trade (M.I.G), contribution to the tradition of the 'Festa das Flores' (annual party of flowers) and level of sustainability of the trade; • Businessman and owner of winemaking activity, Portuguese green wine tradition (A.R.); • Hotel Entrepreneur and President of the Association 'Confraria do Galo de Barcelos' (F.A.M.S.);
Environmental	3	• Public Offices • Technical • Experts	• Councillor for the Environment, Braga City Council (A.B.); • Environmental and Climate Management Technician at the 'Laboratorio da Paisagem' (S.O.); • Councillor for Tourism and Environment, Terras de Bouro City Council (A.M.C.M.);
Institutional	4	• Public Offices • Technical	• Executive Director of the 'Laboratorio da Paisagem' (C.A.R.); • Councillor for Tourism at Guimarães City Council (P.L.S.); • Tourism Technician at Barcelos City Council (L.M.F); • Councillor for Culture, Tourism and Crafts at Barcelos City Council (M.E.B).

Source: Authors.

As these are semi-structured interviews, they are more flexible, which makes it possible to introduce questions related to a main topic. The technique makes it easier for the interviewee to express himself spontaneously while providing the researcher with the means to introduce other questions that may arise and were not initially raised. All of this reinforces the idea of Janesick (2016), which states that it is through questions and answers that the construction of meanings regarding a specific topic is reached.

As for the data, they have been collected by topics divided by dimensions, according to the expertise (social, economic, environmental or institutional) of each of the interviewees. The list of main topics by dimension includes the sessions presented in Figure 6.

Figure 6. *Main Themes of the Interviews by Dimension*

Dimension	Main topics
Social	• The importance of governance processes linked to tourism training, through professionalizing courses; • Citizen participation in trades, activities and customs of the community; • The satisfaction of the tourist and the resident.
Economic	• Public policies before, during, and after the COVID-19 health crisis; • The economic impact of tourism benefits on trade; • The perspective of the current Tourism Policy and the Citizen Policy in actions involving governance; • Local experiences and suggestions for the enhancement of actions related to tourism and economic management.
Environmental	• Negative impacts generated by the activity due to the lack of policies adjusted to each territory; • Intensity of the tourist flow.
Institutional	• Institutional disposition to implement Public Policies, through the creation of a Green Book; • Public policies linked to current tourism challenges.

Source: Authors.

The complementation of this methodology, through interviews, provides interesting information about the territory, allowing a more concrete perspective of the scope of Public Policies related to tourism activity and the degree of openness of institutions, in the face of future challenges in the sector.

Results and Discussion

From the Interviews

Within the social sphere, interviews have been conducted with academic experts, artisans, associations and public officials. An almost universal consensus has been reached among experts regarding the need to maintain the satisfaction of tourists, without forgetting the needs of the local population, as well as the need to influence training in tourism through professionalizing courses. Another recurring theme in the interviews was the one raised by the artisans, by the councillor for the social area and by the management of the museum, regarding citizen participation in local traditions, linked to their satisfaction. From the perspective of the artisans, there is little involvement of the local population in issues related to citizen participation, however, this perspective changes radically and joins the more institutionalized vision, when talking about the Portuguese tradition.

From the economic sphere, in the interview held with the representative of the Association of Artisans of Barcelos, a municipality certified as a UNESCO Creative City (Barcelos Creative City 2017), it was stated that between 2019 and 2020, there was no real support from the administrations responsible for tourism, being "a very difficult period for the artisan sector economically and psychologically". Such a situation should be contoured with the implementation of an adjusted policy, which also takes into account the needs of the sector, in hypothetical crisis situations, in the future. Still in the economic area, and an

interview with local merchants, it was confirmed that, although in 2019 a greater number of tourists was observed, the sector has not managed to impact certain areas, which reinforces the hypothesis that the benefit of these tourist flows is quite marginal (Ribeiro and Remoaldo 2019) and that tourism policies still do not have the perspective of local actors. Stories were collected from merchants and the local population, who lamented the non-existence of tourist routes focused on traditional commerce and the ineffectiveness of the actions that were directed, for the most part, to the historic centre of the municipalities, ignoring remote and/or marginalized areas that could be potentialized, if the design of them had the opinion of local agents.

From the environmental aspect, it was highlighted by the technicians that the region has been facing new challenges related to climate change, as well as the preservation of the environment, being observed the increase in concern for the redesign of Public Policies that are up to the current challenges, such as the increase in fires, touristification and the indiscriminate use of the territory.

In the institutional dimension, the interviews conducted with the councillors and tourism technicians of different municipalities, as well as the management of the "Laboratório da Paisagem", an institution dedicated to promoting sustainable development, innovation, research and scientific dissemination, the early acceptance of the creation of participatory environments for the generation of the Green Book of the region was observed. It also offered means and contacts so that the process could be carried out with institutional support. Still, in the political sphere, the interview with the Councillor for the Environment of Braga highlighted the numerous actions promoted by the municipality, however, it was not a coordination between them that would lead to the redesign of tourism policies more in line with the destination, or that would respond in unison to the current challenges, such as those related to mobility in the destination, in high season periods.

Expected Results

The level of trust that residents have in the institutions responsible for tourist activities in the destination is a key factor in determining the perceived benefits and costs of the activity (Nunkoo and Ramkissoon 2011).

For this reason, the incorporation of techniques for the participation of the local population in destinations such as the spaces that make up the Cávado and the Ave, with rather reserved characteristics, requires the in-depth analysis that this methodology has exposed.

The ideal combination for expanding spaces is to avoid acculturation and touristification, highlighting their cultural, heritage and natural resources, always considering the local perspective. In this sense, tourism has the capacity to boost locally and on a small scale (Cànoves et al. 2017).

As a final result, it is expected that the methodology can bring about the necessary dynamism in collaboration with the local population, fostering the development of sustainable tourism that can boost the economy and counter depopulation.

The territories of Cávado and Ave boast significant cultural heritage, and their enhancement through public-private initiatives has demonstrated considerable resilience in times of crisis, such as the economic downturn in 2015 and the COVID-19 crisis in 2020.

The implementation of governance practices proposed in this study reinforces the paradigm of tourism as a driver of development, which has already been established.

Another expected result is the satisfaction of the local community that welcomes tourists to their territory, tailored to their needs and capabilities, which is a crucial factor in sustaining destination development.

Territories must have the ability to choose the type of tourism that best suits their resources. From this selection, another anticipated outcome is the development of tourism products that create stronger connections between local actors, reducing the need for collaboration with external agents. In other words, it promotes local empowerment and societal dynamism.

Furthermore, economic and socio-cultural revitalization is expected, as tourism activity has a powerful multiplier effect on the local economy and enhances cultural pride and authenticity. This is exemplified by the opening of establishments selling regional products, reminiscent of the traditions of the region, which can be consumed by tourists. This vision aligns with the perspective of du Cros and McKercher (2020), who argue that tourism activity can be a catalyst for enhancing local heritage by transforming culture into consumable products for tourists.

Without losing sight of the core objective of this proposal, which is the creation of a 'Green Book of Tourism' adapted to the needs of expanding areas, this methodology could pave the way for the development of a 'White Paper,' leading to the creation of Tourism Policies aligned with the Region of Cávado and Ave in the north of Portugal.

Conclusion

This research aimed to shed light on the intricacies of tourism policy development by presenting various approaches and methodologies proposed by different academic authors.

Furthermore, the research proposed here sought to offer a methodology inclined to the trends and idiosyncrasies of promising tourist spaces, taking as a source of inspiration the territories that make up the Cávado and the Ave, in the North of Portugal. A region that has been perceiving a significant increase in the flow of visitors and that needs policies adjusted to the features and particularities of the destination, before unsustainable processes such as touristification or acculturation, begin to be part of the development of the activity and the reality of the local population.

To contribute to knowledge in this field, the study presented an adapted version of the three-step structure (Green Paper, White Paper, and Tourism Policy) proposed by the Commission of the European Communities (1995) for the

creation of Tourism Policies. This adaptation focuses on the development of the 'Green Book,' which is more attuned to the destination and grounded in sustainability principles by incorporating sustainability dimensions as core elements of the methodology.

The work presented here represents a significant advancement in understanding the involvement of the local population, the alignment with destination capabilities and needs, and the integration of sustainability dimensions.

It is important to note that this research direction is not yet complete. Following the three-step structure, there is a potential opportunity to develop a methodological proposal for the 'White Paper,' equally tailored to the destination's needs and linked to sustainability dimensions. This remains a subject for future research.

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Towards a Green and Digital Transition for European Tourism

By Peter Jones[*]

The European Commission's new industrial strategy launched in 2020 looked to lay the foundations for the twin transition to a green and digital economy. Within the same year, the advent of the COVID-19 pandemic highlighted the need to accelerate the green and digital development of specific sectors of the European Union's economy. As tourism was arguably hit hardest by the pandemic, it became the first sector for which a transition pathway was developed. The European Commission's report entitled Transition Pathway for Tourism, published in 2022, described the measures needed to accelerate the twin green and digital transitions within the tourism industry. This review paper focuses on the European Commission's report and it includes an outline of the characteristics of the green and digital transitions; a brief outline of the review process; the results of a literature search, undertaken to provide an academic context for the paper; a summary of the European Commission's report with a specific focus on the 'green and digital transition' (European Commission 2022a): some reflections on the green and digital transition of tourism; and a brief conclusion.

Keywords: *twin transitions, green transition, digital transition, tourism industries, Europe*

Introduction

In launching its new industrial strategy in 2020, the European Commission looked to lay the foundations to support the twin transition to a green and digital economy, and to make industries across the European Union more competitive globally. Here the term green transition is taken to mean a shift towards economically sustainable growth and an economy that is not based on fossil fuels and the overconsumption of natural resources, while the term digital transition means the move towards integrating digital technology into all areas of an organisation. The year the industrial strategy was launched, the advent, and increasingly widespread impact, of the COVID-19 pandemic, highlighted the need to accelerate the green and digital development of specific sectors of the European Union's economy. To this end, the European Commission proposed launching transition pathways that were to be co-created with stakeholders, and as tourism was arguably the sector hit hardest by the pandemic, it became the first sector for which a transition pathway was developed. The European Commission's (2022a) report entitled *'Transition Pathway for Tourism'* looks to describe the measures needed to accelerate the twin green and digital transitions within the tourism provide guidance for its stakeholders. This review paper offers a review of, and a

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[*]Emeritus Professor, School of Business, University of Gloucestershire, UK.

commentary on, the European Commission's report. More specifically, the paper includes an outline of the characteristics of the green and digital transition; the results of a literature search, undertaken to provide an academic context for the paper; a brief outline of the review process; a summary of the European Commission's Transition for Tourism report with a specific focus on the *'green and digital transition'* (European Commission 2022a); some reflections on the green and digital transition of tourism; and a brief conclusion.

Green and Digital Transitions

The green and digital transitions, increasingly twinned together, are widely seen as the most important force in securing a viable future for people and the environment. The green transition was developed around the consensus that economic growth must urgently be decoupled from environmental harm to address both climate change and poverty. The digital transition, evolved as companies increasingly realized they could reap a range of economic benefits from the digital technologies. Rehman et al. (2023), for example, claimed that *'in an attempt to promote a sustainable future, the European Commission has set the objective to utilise digital technologies to pursue a green future through systematic transformations by introducing the concept of twin transitions which refers to an intertwined and simultaneous green and digital transition to offset companies' carbon footprint.'*

The green transition can be seen as part of the wider transition to a more sustainable future, and as such, is closely linked to sustainability, but there are important distinctions between the two terms. Essentially, the green transition means using environmentally friendly products and services, while sustainability means producing goods and services in a way that does not damage resources for future generations. Thus, while a final product may be green, its manufacturing or production process may not be sustainable at all. As social awareness of climate change and of the finite nature of the planet's natural and ecological resource base increases, so organisations may pursue several green initiatives designed to reduce their negative impact on the environment.

For Rosario and Dias (2022), *'digital transition involves the application of technologies such as Artificial Intelligence (AI), big data analytics, Internet of Things (IoT), and mobile technologies that are used to develop and implement sustainability solutions.'* However, digital transformation involves cultural as well as technological change. Henley (2020), has argued, for example, that *'the reality ...is that digital transformation isn't about software or technology – it's about organizational adaptability. To keep pace with the change driven by digital transformation, organizations must be agile and adaptable, and organizational culture is crucial to the success of any digital initiative.'*

The Review Process

This paper offers a review of, and a commentary on, the Transition Pathway for Tourism. This report, published by European Commission's Directorate General for Internal Market, Industry, Entrepreneurship and SMEs in 2022, which aims to provide guidance for European tourism stakeholders, provided the principal source of information for the paper, and the stimuli for the review's reflective discussion. The report was well structured and clearly signposted and the author used this signposting to draw out, and describe, its main features. That said, in his summary, the author focused on those features of the report that he considered central to the green and digital transition. This approach to the review process has the advantage of providing specific and first-hand insights into the European Commissions' policy thinking on the twin transition with the tourism industry, but as with any single source review, it can be criticised for its lack of methodological rigour, researcher subjectivity, and external validity. Nevertheless, the author believes that his approach is fit for purpose in providing a review of current European Commission thinking on the challenges in achieving green and digital transitions in the tourism industry.

The paper also includes the results of a simple literature search designed to explore research undertaken on the twin transition. A search was undertaken in April 2023 via Google Scholar, using the key term twin transition, via the Google Scholar, to provide an academic context for the review. In selecting research publications for this review, the aim was not to offer a comprehensive examination of the literature on the twin transition, but rather to provide a flavour of the scale and variety of this work, and here again researcher subjectivity is an issue. The issues raised in the reflective discussion reflect some of the author's longstanding concerns about both the green and the digital transitions and about the sustainability of the continuing growth of tourism, the relationship between sustainability and digitalisation, and digital responsibility.

Literature Search

There is growing interest in the twin transition in the academic literature, but no research has been published, to date, in that literature on the twin transition within the tourism industry. That said, three, partially interlinked, themes stand out from the literature search, namely, how the twin transition can drive green competitive advantage, the relationship between digital transformation and sustainability, and the role of SMEs in twin transition. The aim of this literature search was offer some idea of the flavour and variety of this work, and to provide an academic context for the paper, rather than provide a comprehensive picture of research in this field.

Rehman et al. (2023) investigated whether the pursuit of the twin transition can enhance a company's green-based competitive advantage. The empirical finding suggested that the Internet of Things, green human resource management, and investment in environmental management strategies are both directly, and

indirectly, linked with a company's green competitive advantage, and that management seeking to improve such an advantage, could do so by adopting the green transition. The study claimed to make two contributions, firstly that technological innovation and green work climate perception, increase green competitive advantage, and secondly, that green work climate perception positively strengthens the relationship between technological innovation and green competitive advantage.

Dabbous et al. (2023) looked to evaluate the effect of digitalisation on entrepreneurial activity and sustainable competitiveness, and the authors claimed a number of contributions to the literature. The study measured the degree to which the overall level of eco-digitalisation contributes to sustainable competitiveness, and it extended the notion of competitiveness beyond its economic value, to include social and environmental dimensions. At the same time, their work tested the relationship between digitalisation, entrepreneurial activity and sustainable competitiveness, and it provided a better understanding of the twin transition concept. Finally, the results of the study were seen to provide several practical implications for governments and policymakers, who should look to account for the importance of new technological innovations when formulating policies aimed at increasing entrepreneurial activity and fostering sustainable competitiveness. Here there are implications for tourism businesses, particularly perhaps for SMEs, in that such businesses may not have the financial resources or the employee expertise to harness the benefits of the digital technologies.

Ortega-Gras et al. (2021) looked to examine two issues. Firstly, to analyse, at a European level, the existing policies that foster the twin transition, and secondly, to provide practical use cases and international projects, where circular economy practices are boosted through the implementation of key enabling technologies. The authors concluded with a set of recommendations designed to boost the twin transition in those sectors where digital technologies had already been introduced to a greater extent with green purposes, and to foster their implementation in less advanced sectors. These recommendations included setting clear objectives of digitalisation and circularity for those advanced sectors to help to spread the process; establishing new strategic plans to foster the twin transition in manufacturing, energy, electrical and electronic, and mobility industries; providing the necessary skills to understand and implement the transition; and supporting research and development activity on those technologies that are already accelerating the circular transition. As such, the European Commission's report provides details of one of these recommendations, namely the establishment of a strategic plan to foster the twin transition, albeit within the tourism industry.

Rosario and Dias (2022) argued that little attention had been paid to the connection between digital transformation and sustainability, and looked to develop a systematic bibliometric literature review to demonstrate the potential contributions of the digital transition to environmental, economic and social sustainability, and thus help to fill this knowledge gap. In focusing on environmental sustainability, for example, Rosario and Dias (2022) argued that the digital transition involves the application of a range of digital technologies to implement sustainability solutions, in areas such as sustainable urban development,

sustainable production, and pollution control. In a similar vein, economic sustainability was seen to involve digital technologies driving transformation into a more sustainable circular economy, the digital sharing economy, and to establish sustainable manufacturing and infrastructure design. In the digital transition to social sustainability, the studies analysed the need for multidimensional policy perspectives to address the current digital divide. However, while digitalisation may help to achieve sustainability goals, it may also increase energy consumption and generate other environmental problems

Bianchini et al. (2023) explored the nexus between digital and green transitions in European regions in an effort to identify the impact of digital and environmental technologies on the greenhouse gas emissions originating from industrial production. Their results revealed that the beneficial effect of environmental technologies is stronger in regions with large digital technology endowments and, conversely, the detrimental effect of digital technologies is weaker in regions with large green technology endowments. The authors concluded that policy actions promoting the twin transition should take this evidence into account, in light of the potential downside of the digital transformation when not combined with the green transformation. These findings highlighted the wisdom of the European Commission in looking to combine the green and the digital transitions to develop tourism, but also suggested that success in developing tourism policies based on the twin transition may face major challenges in the more remote regions of Europe.

Almansour (2021) examined consumers' responses to the twin transition via a study of the role of e-businesses and digital marketing associated with electric vehicles. This research revealed that consumers' adoption of electric vehicles was affected by digital features, financial considerations, and environmental concerns, mainly driven by misinformation, about the adverse effects of electric vehicles on the environment. The study revealed three sets of practical and policy implications for supporting the twin transition. Firstly, that while there was an awareness that electric vehicles can help to reduce carbon dioxide emissions, consumers were reluctant to change their traditional motoring habits, and thus there was a need to raise awareness of the current climate crisis, and that digital marketing could play a key role in this process. Secondly, given that electric vehicles are only as sustainable as the power source used for charging them, it is vital that utility companies transition to 100% sustainable energy production, and thirdly, that government and manufacturers should work together to make electric vehicles more affordable.

Chen et al. (2023) looked to identify which digital technologies could be applied with which elements of lean production, to produce environmental benefits. More specifically the authors carried out a case study in three Swedish SME's and undertook a literature review to investigate the frameworks and practices of digitalised lean implementation, and the resulting environmental impact. The paper identified an exploitative innovation approach to using lean production as a bridge leading toward the twin transitions. The Internet of Things, and related connection level technologies, were identified as the most commonly applied digital technologies, in that they can be widely integrated with lean principles through tracking, monitoring, connecting, and analysing the collected

data to enhance visual management, standardization, and inventory reduction. Here benefits were seen to include, reductions in natural resource and energy consumption, and reduced transport demands.

In focusing upon Romania's SMEs, Ogrean and Herciu (2021) looked to explore both the readiness of the country's SMEs for the European Union's twin digital and sustainability transition, and how well the country's SMEs were matching up to the European Union's benchmarks. Their findings revealed that for many Romanian SMEs, targeting environmental and social sustainability was seen to be expensive and hardly worthwhile, with less than obvious short-term benefits. A lack of managerial skills and little evidence of customer demand, were seen as major barriers to increasing commitments to sustainability. At the same time, the digital performance of the country's SMEs was also well below the overall European average. Here a lack of financial resources, a shortage of digital skills and a general lack of internal interests in digitalisation were seen as barriers to change. As such, these findings might be seen to call into question the European Commission's focus on the role of SMEs in its Transition Pathway for Tourism.

Little of the published work on green and digital transition has looked to provide a theoretical framework to help to guide and structure future research or to help to locate it within business and/or social structures, but Zhang et al. (2023) used the perspective of socio-technical systems theory to examine the green empowerment of digital technology, in relation to manufacturing industry in China. More generally, Zhang et al. (2023) suggested that technical systems theory suggested that managers can play an important role in the interaction between technological and social systems, and this has implications for the role of tourism managers in developing green and digital transition policies.

Summary of European Commission's Transition Pathway for Tourism

The Transition Pathway for Tourism report opened with an introduction which outlined the basic characteristics of the tourism industry, and the impact of the COVID-19 pandemic on the industry. The main body of the report included details of the policy and governance frameworks on transition pathways as relevant to tourism; green and digital transition; long term resilience; the role of funding and investment in enabling the transitions; and the arrangements for supporting and monitoring, the transition process. By way of a concluding annex the report proposed 27 detailed action topics.

In its introduction to the green and digital transition, the European Commission explicitly recognised that tourism's links with other industrial sectors can both contribute to, and hamper, the transition process. More specifically, a number of industrial sectors, including, the aerospace, agriculture and food, construction, cultural, digital, health, transport, and retail, were all seen to have a direct impact on the sustainable and digital transition of tourism. As such, the European Commission emphasised the need for coordination at the local, regional, national, and European Union levels.

In addressing the green transition, the European Commission argued that the competitiveness of the tourism industry depended in no small measure, on its capacity to meet the customer demand to become more sustainable. Here changing habits to produce more sustainable outcomes, was seen to cover a wide range of issues, including the consumption of locally sourced products, reductions in waste generation and water use, and changes in travel modes. A range of strategies, across a number of sectors, were seen to be essential to meet the demand for more sustainable tourism. Passenger transport companies would need to reduce their greenhouse gas emissions in the drive to become carbon neutral by 2050: cities and regions would need to develop sustainable mobility for climate neutral cities; buildings would have to become more energy and resource efficient; the tourism and hospitality sectors should work towards a more circular business model; and customers should be provided with more information about the environmental footprint of their proposed destinations.

Turning to the digital transition, the European Commission suggested that the digitisation of the economy and society, and the increased scope for data collection and services, would provide important opportunities to transform tourism services. More specifically, the argument is that making better and innovative use of data will be a key factor in boosting competitiveness and innovation in tourism services. The hope is that this will improve data access for smaller businesses, and this will in turn, allow such businesses to anticipate customer demand, and to analyse customer profiles and tourism trends more effectively, and ultimately to provide enhanced customer experiences.

The European Commission called for the creation of public-private partnerships and funding arrangements, which could be important in facilitating new types of data sharing, which the European Commission argued could have a number of benefits including supporting better decision making, enhancing the competitiveness and resilience of destinations, and preparing future research proposals for funding to accommodate circular tourism projects. At the same time, the European Commission suggested that this would require the creation of data sharing practices and agreement models that comply with the necessary privacy rules and respect the legitimate commercial interests of each partner. More generally, it was argued that the digital transition should also help to make information on the sustainable tourism offer within the European Union more visible and known online.

A number of other issues were also presented under the banner of the green and digital transition, including, the role of small and medium sized enterprises (SMEs), research, innovation and technology, measuring and reducing both the environmental footprint, and barriers to taking up new solutions. In focusing upon SMEs, for example, the European commission argued that local communities could become key players in the transition towards sustainable tourism through social economy approaches, such as community co-operatives, in which local actors in tourism supply chains are involved in the promotion of destinations, and the co-design and governance of online booking systems.

In focusing on barriers to taking up new solutions to promote the sustainable and digital transition, the low level of digital skills amongst SMEs was seen as a

specific barrier to the adoption of new digital solutions. Here, such skills were seen to be important in marketing and also for developing innovative and improved services to meet changing tourism demands, and improving the efficiency and sustainability of SMEs. Looking to the future, the European Commission emphasised the need to develop new digital technologies such as virtual reality, big data, and blockchain, to be able to respond effectively to changing customer expectations. However, while the implication from the European Commission was that harnessing these new digital technologies could bring a wide variety of benefits for the tourism industry, there was little information on how these benefits would be realised.

The 27 action topics cover a wide range of issues, for example, covering sustainable mobility, the circularity of tourism services, data driven tourism services, and support for digitalisation of tourism for both SMEs and destinations. While it is not feasible to present all 27 topics in this paper, two illustrative examples serve to provide a picture of the actions themselves, the actors involved and the expected outputs. Firstly, in addressing regulatory support for multimodal travelling, the principal actors were seen to be national, regional and local authorities and the tourism industry, while the expected outputs were increased opportunities for visitors to make door-to-door travel arrangements for both urban and rural destinations. In a similar vein, in addressing the circularity of tourism services, developing the use of locally supplied ingredients and increasing water efficiency, national, regional and local authorities, tourists, and hospitality organisations were seen to be the principal actors, and the expected output was halving the amount of non-recycled waste by 2030.

Reflective Discussion

The European Commission's Transition Pathway for Tourism report offers a wide-ranging prescription for the green and digital transition of Europe's tourism industry. However, three wider issues, namely the sustainability challenges to the growth idiom in tourism, the complex relationship between digitalisation and sustainability, and the role of SME's in the drive to the twin transition in the tourism industry, merit some reflective discussion.

Firstly, tourism is seen a major engine of economic growth. The United Nations World Tourism Organisation (2022), for example, reported that *'international tourism growth continues to outpace the global economy'*, and Julia Simpson, the President of the World Travel and Tourism Council (2022), recently claimed *'despite the difficulties the sector has been facing, our projections point to a strong decade of growth.'* The Travel and Tourism Council (2021) clearly see the continuing growth in tourism as not only having an important role to play in driving economic growth, but also as an accelerator of social progress, and an enabler of community enrichment. So seen, tourism is cast as making a positive contribution to sustainable development, but it also brings a wide range of major environmental and social problems, including the depletion of a wide range of finite natural resources, pollution, the destruction of traditional ways of life, and

problems with tourist-host relationships. Ultimately, this dichotomy raises *'the growth paradox'*, namely *'can tourism ever be sustainable?'* (World Economic Forum 2017).

The European Commissions' Transition Pathway for Tourism has a commitment to sustainable growth, but it offers no definition of the term. As such the European Commission might be seen to reflect the position put forward by Torkington et al. (2020) that in many European national tourism policy documents, the term *'sustainable is appropriated to suggest continued growth, rather than reflecting the finite limits of ecological and societal sustainability.'* Further, Torkington et al. (2020) argued that the terms growth and sustainability are often seen compatible by governments and policy makers, whereas they believe them to be incompatible. While the European Commission's conception of sustainable growth might be seen to be consistent with the traditional economic view that the term is used to refer to realistically achievable growth that the tourism economy can maintain, there is no detailed evidence to suggest that it refers to an approach to growth that can be achieved without generating the environmental and social problems referred to above, or by dramatically reducing such problems.

In looking to address the growth paradox mentioned above, the World Economic Forum (2017) emphasised that *'truly innovative thinking is needed from destination authorities and business leaders working together to determine how to manage growing visitor numbers, address changing traveller expectations and shape and improve both visitor and host experiences.'* More specifically, in illustrating its focus on innovative thinking, the World Economic Forum (2017) suggested that there were major opportunities for businesses, visitors, and host communities, to derive greater benefit from tourism, and that many problems could be addressed, for example, through increasing adoption of the principles of the circular economy, enhanced economic, social and environmental impact measurement, and the introduction of the sharing economy. Here the argument is that such measures, will help to support science-based decision making, help to mitigate tourism's negative effects, and help reduce the commodification of the beautiful and historic places on which the tourism industry depends.

While it remains to be seen if such an approach can deliver truly sustainable growth that respects finite environmental boundaries and social communities, more radical, approaches can also be identified. Fletcher et al. (2022), for example, recognised both the numerous problems associated with conventional tourism development and that calls for sustainable tourism development were couched within the traditional growth idiom, but argued that growth itself was the *'fundamental problem that needs to be addressed in the discussion of sustainability in tourism.'* Further, Fletcher et al. (2022) suggested that continuing growth was intrinsic to capitalist development, and that an alternative focus should be on post-capitalist practices which looked to socialise the tourism industry. In looking to illustrate such an approach, Fletcher et al. (2022) offered four empirical examples drawn from Barcelona, Sao Paulo, Buenos Aires, and Berkel-Enschot in Holland. However, it seems very unlikely at the present time, that the tourism industry will have any sort of appetite for such an approach.

Secondly, there are issues in and around the relationship between sustainability and digitalisation. Initially, Lenhe and Dethier (2020) suggested that while the European Commission has consistently placed the twin green and digital agendas side by side, it is '*not yet properly connecting them to reap the synergies and to manage the risks they present to each other.*' Here, Lehne and Dethier (2020) argued that there were '*two key issues with referring to green and digital as twin transitions*', namely that '*it makes them seem both too similar and too separate.*' On the one hand, it was argued that while the green and the digital transitions were happening in parallel and that both would have massive consequences for the future of work, and for existing political systems, they are fundamentally different. The green transition was seen to be a necessary response to the worsening climate crisis, while the digital transition is about the European Union not falling further behind its peers in harnessing the benefits of the digital technologies. On the other hand, Lenhe and Dethier (2020) argued that the two '*are more interlinked than the twin analogy suggests*', not least in the links between the demands the digital technologies make on the environment are not fully explored, and that '*a changing climate could both accelerate and disrupt digital trends at different levels.*'

The European Commission (2022b) looked to address some of these concerns in presenting a forward-looking strategic reflection on the interactions between the green and digital transitions, and argued that both were top of the European Union's political agenda. The European Commission (2022b) argued that the digital technologies could play a key role in achieving climate neutrality, in reducing pollution, in enhancing biodiversity, in improving resource efficiency, in facilitating the design of more sustainable processes, products and buildings, and in facilitating the introduction of more circular business models. At the same time, the European Commission claimed that the green transition could transform the digital sector, in that renewable sources of energy, including solar and wind energy, and nuclear energy and nuclear fusion technology, will all be important in meeting energy demands for data centres and cloud infrastructures.

However, the increasing adoption of digital technologies to tackle environmental problems might also be seen to be the antithesis of sustainability, and more specifically, of sustainable consumption. Here, the European Commission recognised that unless the digital technologies become more energy efficient, they will not only lead to an increase in energy use, and in greenhouse gas emissions, but that tensions will also arise in relation to environmental waste and the environmental footprint of the digital technologies. At the same time, these technologies increasingly enable consumers to buy a wide range of goods and services instantly, regardless of the consumers' location or the time of day, at the touch of a button or a key, further contributing to unsustainable consumption. More generally, ICTworks (2020), an online community for international sustainable development professionals, argued that the digital technology industry is one of the least sustainable and most environmentally damaging industrial sectors, and claimed that the digital technologies, and their use, '*have very significant impact both on the environment in general and also on the constituents of the Earth's climate.*'

Thirdly, over 99% of the businesses in the tourism sector in the European Union are SMEs (European Court of Auditors 2021) and it is not surprising that the European Commission's Transition Pathway for Tourism envisaged an important role for these businesses. However, while many large hotel and hospitality companies in the tourism industry have well established and wider ranging sustainability programmes, SMEs are much less likely to have such programmes, and where SMEs do have an eye to sustainability, it often focusses on individual issues, such as the local sourcing of produce, and reductions in the provision of single use plastics for customers' toiletries, rather than a full range of environmental and social agendas. SME's also face a range of problems, including a lack of information and communication technology infrastructure, especially in rural areas, a lack of digital skills, and a lack of awareness of the potential business benefits of digital transformation. More generally, it remains to be seen if SMEs have the financial resources, the skills, and the inclination, to grasp the twin challenge.

While the European Commission's Transition Pathway for Tourism emphasised the benefits of the digital technologies, for SMEs, the digital responsibilities, increasingly captured in the concept of corporate digital responsibility, of tourism businesses adopting these technologies, was not explicitly recognised. Corporate digital responsibility, simply defined as *'a set of practices and behaviours that help an organisation use data and digital technologies in ways that are perceived as socially, economically, and environmentally responsible'* (Corporate Digital Responsibility 2022), embraces people, the economy and the planet. Within the tourism industry, SME's digital responsibilities to people, include their customers, their employees and society at large. Here, for example, customers may transmit personal and financial information on their mobile phones and/or via the internet, and the privacy and security of such information will be paramount to such customers. Digital responsibilities to the economy can be seen to include the SMEs themselves, their shareholders, and their suppliers, while the responsibilities of the SMEs to the planet embrace a range of environmental issues, notably climate change, natural resource depletion, energy use, and waste management. Here again, it remains to be seen how well SMEs will recognise and address their responsibilities.

Conclusion

The European Commission's Transition Pathway for Tourism report offers a variety of measures to accelerate sustainable and digital transition within the industry and it offers guidance, and a series of action points, for stakeholders, but the report has relatively little to say on how SMEs will rise to the challenge of the twin transition, on how barriers to their adoption might be overcome within the tourism industry, or on how tourism companies that adopt digital technologies might go about discharging the responsibilities associated with these technologies. More generally the author of this paper has a healthy scepticism not only about how widely the tourism industry within Europe will adopt these measures and

follow the European Commission's guidance, but also about how the efficacy of a single Europe-wide policy solution for the twin transition, will play out in practice. At the same time, some wider issues, namely, the sustainability challenges to the growth idiom in tourism, the complex relationship between sustainability and digitalisation, and the role of SME's in the drive to sustainability and digitalisation in the tourism industry, pose challenges for the industry.

Nevertheless, this paper provides a review of the European Commission's recent thinking on the twin transition within the European tourism industry. While this is a review, not an empirically based research, paper, and as such it can, at best, only make a minor contribution to helping to fill the gap in the academic literature on the twin transition in tourism identified earlier, it may provide a platform, for future research enquiries. Such research might focus, for example, on progress on the twin transition in individual European countries, and perhaps more specifically on the twin transition in rural areas both generally, and within countries. Research might also profitably explore the socio-cultural and employment impacts of the twin transition, and how barriers to transition may be overcome. The role of some of the large companies in the tourism industry in driving the twin transition would also merit research attention, as would some survey and case study research on the role SMEs are playing in the twin transition process. Research into how both large companies and SMEs within the tourism industry are addressing their corporate digital responsibilities could also add to the body of work in this emerging field.

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Tourism Safety and Security:
Strategies Adopted by some African Economies

By Boitumelo Caroline Rasethuntsa[*]

Most African countries depend on tourism for job creation and income generation; and in order to attract more international tourists, Africa should provide a safe and secure environment for visitors. Safety and security are significant towards quality tourism and should be regarded as a key objective especially in Africa where tourism competitiveness is weak. This issue deepens the need for policy reforms and improvement in this area. The aim of this study is to establish the tourist safety and security strategies adopted by four African countries namely, Mauritius, Egypt, Tanzania, and Botswana. The study adopts a literature review approach to gather data, and an analysis of the data is used to establish similarities and differences in the strategies utilised by the four benchmarking countries. The outcome of this study reveals that strong collaborations between the public and private sector in ensuring safety and security in the tourism sector is critical. Intra-governmental collaborations are also essential in facilitating and promoting cooperation to provide safety and security for tourists. An investment in modern technology and development of relevant laws and regulations are also key in providing a secure and safe environment for tourists. The study further develops medium-term and short-term strategies to guide other African economies for improving safety and security for tourism purposes.

Introduction

Tourism is a growing industry that directly and indirectly leads to a positive impact on economic development (Tachir and Alali 2022, Rasethuntsa 2022). Because destinations are competing with each other to attract tourists (Sayeh 2022), tourists are likely to avoid unsafe destinations or regions, making them less attractive for visiting. Safety and security in tourism is not a new phenomenon and had been identified as a tourism problem since the 1950s (Van Vuuren 2016). Peace and security are factors that determine international tourist flow in to a tourist destination (Gidebo 2021, Mawby and Vakhitova 2022), and as noted by Kovari and Zimanyi (2011), safety and security matters have become a topic of higher interest in the tourism discipline over the past two decades. Furthermore, the study of Kovari and Zimanyi (2011) also articulates that the world was faced with several changes during the last two decades like terrorist acts, civil wars, natural disasters, epidemics and pandemics which have all led to a decline in security. The travel and tourism industry globally could not escape the harmful consequences of these events. For example, Lebanon's political instability,

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[*]Senior Lecturer, Lerotholi Polytechnic, Lesotho.

terrorism incidents, and wars led to a strong deterioration in tourism development and a decreasing number of foreign tourists (Harb 2016). Again, Walters et al. (2015), identified that there is a strong relationship between destination image and destination choice in the post-disaster context. This research identified that people who chose not to visit Queensland (Australia) labelled Queensland a poor image destination after the flooding; hence influencing their decision not to visit the area.

Because tourism brings many people in a small area and introduces new people to a tourist destination, this does sometimes lead to problems such as crime (Lisowska 2017). Examples of travel and tourism crime-related incidents include robbery, theft, rape, murder, and kidnapping (Pizam and Mansfeld 2006). Tourism is also affected by security threats such as terrorism and corruption targeted to international tourists (Fourie et al. 2020). Type of motives declared for these crimes mostly include religion and hostility on tourists and destruction of an area economy (Pizam and Mansfeld 2006). To exemplify, Egypt, Iraq, Syria and Turkey are examples of countries which have suffered declines in religious visitors due to tourists being attacked. The upsurge of religious terrorism which is understood to be motivated by religion is an ongoing dilemma which threatens tourism, and this issue calls for terrorism laws and policies to be implemented (Chowdhury et al. 2017).

Literature Review

Research on tourism security has recently been dominated by the terrorism factor citing reasons of this phenomena as, unemployment, tourism in the attacked countries, spill-overs from other countries not involved in the event, and deflation (Baker 2014, Neumeyer and Plumper 2016, Goldman and Neubauer-Shani 2017). For example, Lebanon's tourism suffered because of events that took place in the nearby countries and the region such as, the Arab Spring, the Syrian conflict (Harb 2016). As much as safety and security issues are a dilemma in tourism destinations, (Lisowska 2017) highlighted that challenges related to assembling criminal information result in relatively few studies being conducted regarding the challenges of tourism and crime. In an attempt to improve security in the transport sector, the Belgian Civil Aviation Authority (2010) highlighted some strategies that were developed for civil aviation in Belgium, and these include:

- Establishing a national safety library.
- Developing safety performance indicators.
- Developing a strategy concerning safety training and safety promotion.

Unfortunately, developing countries in this era are still experiencing challenges of establishing tourism policies that address today's current tourism issues (Okharedia 2017). Looking back at the United Nations World Tourism Organisation reports, it could be established that developed countries have long-established tourism safety and security measures. For example, the United Nations World Tourism Organisation (1996) shared that to secure safety and security for its

tourists, the United States formed coordination committees meet at the beginning of every summer to discuss emerging issues, coordination of joint actions, and guidelines unification. Regional committees are composed of security, civil protection, tourism officials, local communities, and other persons concerned. Once the season is over, a study day is organised at the country level to review the action plan, present the statistics, examine the results, and draw conclusions and draft proposals to help modify or improve the future action.

According to the Netherlands Ministry of Foreign Affairs (2018), world security is not standing still, for example, changes in economic power, instability and insecurity around Europe has fast-tracked technological developments, an escalation in hybrid, and conflicts within Europe are speedily having an impact on The Netherlands security. Treinnovski and Jefimovs (2012) highlight that in as much as the idea of national security is not a new concept, the development of mankind influenced the need to investigate more on the idea of national security considering not only visible but internal and invisible threats extending it on economic, political, crime rate, natural resource, state borders, and natural hazards. For example, globalisation forced governments to emphasise the opening of borders, making it possible for the movement of people to be easy. However, this has opened doors for the transport of illegal substances like drugs, criminal and terrorist networks, illegal migration, environmentally damaging exotic species, and cross border movement of pathogens, such as the severe acute respiratory syndrome (SARS) (Asghari 2016). In Nigeria, for example, new forms of violent crimes have become a norm; these include kidnapping, Boko Haram bombings, rape, public and private institutions being attacked and political violence (Otto and Ukpere 2012). These security challenges have resulted in an increment in budget spending for security and the destruction of valuable government facilities which have all threatened the sustainable economic development of this country (Adebakin and Raimi 2012).

Rouhiainen (2013) also shed light that the world has dramatically changed, and people have been transferred from safe private homes to a unified global living environment which has its risks and threats. This study adds that threats cannot be wholly eradicated or predicted with accuracy, therefore, maintaining an acceptable standard of safety and security in modern society requires new ways of thinking, new safety culture and novel concepts of safety management. In this regard, the strategies that different countries use to meet actual challenges frequently differ greatly, as they are motivated by the country's specific social, political, and economic contexts (Herzog et al. 2016). For example, Australia's high safety and security condition have been influenced by their strong economy, unlikeliness of major war, highly-effective national security capability, and tight alliances with the United States, and they also have strong relations with many influential countries regionally and across the world. According to Shvindina (2019), collaborations are highly essential and are noted as a trend to promote safety and security.

Because factors related to safety and security appear as key drivers affecting travel decisions (Moya Calderón et al. 2022), this research aims to explore

mechanisms used by Mauritius, Egypt, Tanzania, and Botswana to promote tourist safety and security and will attempt to answer this main research question:

> What are the practical measures adopted by Mauritius, Egypt, Tanzania, and Botswana to improve tourist safety and security?

According to the Travel and Tourism Competitive Index (TTCI) reports of 2015; 2017; 2019; 2022, these four countries are among the leading performers in tourism in the African continent. As observed from the TTCI reports between 2007 and 2022, African countries have a weak tourism competitive stand as evidenced by the low-ranking scores there-in (World Economic Forum 2015, 2017, 2019, 2022). However, it could be noted from the TTCI reports that Mauritius, Egypt, Botswana, and Tanzania have at least been ranked among the 10 best performing countries in Africa and their performance in tourism have improved from 2015 to 2019. Most African countries rank in the bottom 30 out of an average of 135 countries; indicating that Africa has a small market share in the global tourism industry (World Economic Forum 2015, 2017, 2019, 2022). The selected countries' strategies would therefore be used to inform policy for other African countries to enable improvements and policy reforms in tourist safety and security to boost tourism performance in less competitive countries.

Methodology

This study identified a literature review approach as the best method to generate information for the subject under investigation. Secondary data appeared to provide a suitable pool of data to allow the researcher to bring-forth reliable findings. According to Blaikie (2009), research data can be gathered through primary, secondary, and tertiary data means. Literature can serve as a basis for knowledge development, create guidelines for policy and practice, provide evidence of an effect, and have the capacity to create new ideas and directions for a particular field (Snyder 2019). The safety and tourism practices of Mauritius, Egypt, Tanzania and Botswana shall therefore be explored using information from various secondary sources. Various means were used to generate information for this research. These included scholarly online databases, government and non-governmental organizations reports, magazines, newspapers, Google Scholar, books, and government and non-governmental organizations websites to identify strategies employed by Mauritius, Egypt, Tanzania and Botswana towards improving tourist safety and security. A table format was used to analyze the findings and identify the strategies' similarities and differences. This enabled to study to develop medium- and short-term strategies or policy recommendations that can be considered by other African countries to improve safety and security for tourism purposes.

Results

Case of Mauritius

In Mauritius, crimes directed to tourists such as pickpocketing and purse snatching usually occurs in busy shopping malls, tourists' attractions areas and near Automated Teller Machines (Riskline 2023). With tourism as one key sector in the Mauritian economy, the government intends to safeguard the country's image as a safe tourism destination hence the installation of Circuit Television Surveillance Systems in key tourists' areas including the urban zones. Plans are in the pipeline to expand the network to other high-risk areas. Also, in collaboration with the private sector, the Mauritius government has also expressed its intention to develop smart cities and technopoles across the country, and it is expected that these initiatives will generate significant demand for security equipment and services and to ensure residences safety (International Trade Administration 2017).

The Mauritian police have prevented a handful of Automated Teller Machines (ATM) skimming operations before ATM users sustained losses (Riskline 2023). The Mauritius Police Force is fully oriented in its duties regarding the increasing number of tourists visiting their country. The department objectives have been directed towards ensuring more protection and safety to tourists, speeding investigations of crimes where tourists are victims and handing out information regarding the outcome of the investigations. The department has also increased presence next to hotels, restaurants, shopping centres, and other related areas. In addition to these, the department further carries out regular patrols and responds to requests for assistance coming from tourists directly or through the Police Information Room (The Mauritius Police Force 2018).

In Mauritius, hotel room thefts sometimes occur, though most burglars normally avoid confrontation and break-ins do not typically involve violence (Riskline 2023). To address this challenge, the Mauritian government requires all tourists' accommodation facilities to provide locks and in-room digital safes as well as access control systems in secured areas (International Trade Administration 2017). All these strategies contributed to Mauritius falling among the safest countries in the region for visitors (Riskline 2023).

Case of Egypt

The Egyptian government exercises a high degree of caution due to the unpredictable security situation and threat of terrorism, hence, there is a high presence of Egyptian Armed Forces in high-risk destinations across the country (Government of Canada 2023a). Egypt has been identified as a medium threat location for crime directed to foreigners and many criminal attacks against foreigners are crimes of opportunity (United States Department of State Travel Advisory 2018a). To attract more tourists to Egypt and to ensure the visitors' safety and security, the Egyptian government set aside 250 million Egyptian pounds ($32 million) to strengthen the state of security at the country's key resorts in 2016. Moreover, the Egyptian government has taken actions to strengthen

tourists' security by purchasing detectors and new scanners, increasing the number of security workers in the tourism sector, and deploying more police dogs (Gore 2016).

In addition to these, the government of Egypt in collaboration with the public sector, are appraising the current security systems and technologies to upgrade these pieces of equipment in airports, sea points, and public facilities. The police department is also continuing to stay abreast with the latest innovations to ensure Egypt's safety and security (International Trade Administration 2018). To ensure passengers' security, the Egyptian government managed to improve airport security by partnering with the British aviation security firm (Principles for Responsible Investment 2017). Egypt visitors may experience a range of professionalism when dealing with police, as the police are highly responsive to visitors' who need assistance and will initiate investigations based on the report of crime (United States Department of State Travel Advisory 2018a).

Case of Tanzania

According to the Intelligent Protection International Limited (2023a), Tanzania is ranked as a medium high-risk country in terms of safety and security for tourists as there is a general threat of terrorism where western tourists are the main targets of terror attacks. Crimes that could affect tourists usually occur in areas such as beaches, hotels, nightclubs, cinemas, and shopping centres. Most crimes targeted to tourists are committed by unarmed assailants and normally occur in urban areas where these assailants target people carrying bags, backpacks, computer cases, cameras, purses, or items left visible inside a vehicle (Government of Canada 2023b).

In response to these security threats, in consultation with all related stakeholders, the Tanzania Police Force established a special unit which is aimed at improving the security of diplomats and tourists in the country. The mandate of this unit was established after consultation with all tourism stakeholders (Tanzania Tourist Board 2018). Another example of a safety measure taken by the Tanzanian government to tighten security and safety for tourists is that a few days before the general elections, there is always a huge deployment of tight security in most streets in Dar Salaam, Arusha and other key tourism sites. This move intends to encourage incoming tourists and to guarantee a 100% security status even though the country is heading to the national elections (Tairo 2015).

According to Tanzania Civil Aviation Authority (2014), to strengthen travellers' security, one strategy used by the Tanzanian government was to draw the civil aviation security regulations in 2014 to safeguard civil aviation against illegal acts to protect airports, travellers and airport properties. The intention was also to regulate the conduct of people at airports and on-board aircraft for civil aviation security. As a result, the Tanzania Airport Authority (2018) reports that in all airports, security checks have been reinforced by the screening of passengers and their baggage to assure that there are no prohibited items and dangerous substances.

Case of Botswana

According to the Intelligent Protection International Limited (2023b), Botswana is ranked as a low-medium risk country in terms of safety and security for tourists. Criminal incidents that could affect Botswana's tourists are mainly crimes of opportunity such as smash-and-grab from parked cars, purse snatching, and residential burglaries. To curb the rate of crimes like these, Botswana has enforced strict gun control laws. The government has engaged in public awareness campaigns sensitising people about this issue and encouraging citizens to report illegal firearms to the police (United States Department of State Advisory 2018b).

Also, in an effort to build crime-free streets and improved security for tourists, the country's police department has engaged Huawei to install surveillance cameras in major cities and strategic locations. The instalment of cameras has recently been completed in Gaborone, which was to be followed by Francis Town (Dinale 2018). It has been reported that the police department has increased visibility in tourist attractions by having regular patrols which in-turn has significantly decreased the frequency of crimes targeted to tourists (Botswana Police Service 2015).

To upgrade the level of safety and security for tourists, the Botswana Tourism Subsidiary Legislation emphasises that suitable firefighting equipment shall be offered to all tourist organisations where accommodation for tourists is provided and shall be easily accessible and marked (Government of Botswana 1996). Having put all these strategies in place, according to the Intelligent Protection International Limited (2023b), Botswana is generally viewed as a safe country ranking in low-medium level threat countries.

Lessons Learned from Mauritius, Egypt, Tanzania and Botswana

From the review of the four countries, important lessons can be drawn. Table 1 outlines the strategies employed by the four selected countries for the second pillar in the TTCI model, namely safety and security. It could be noted from the table that all countries except Tanzania have installed surveillance cameras and other technological security systems in key tourism areas, while all other countries except Mauritius have collaborations with the public community to fight tourism crimes. Only Mauritius and Egypt have made a move towards smart cities and technopoles and have kept an eye to technological developments that improve tourists' safety and security. Both Mauritius and Botswana increased police presence near key tourism zones and established safety laws that guide the hotel industry. Both Tanzania and Egypt have engaged in civil aviation to fight tourism-related crimes. Only Mauritius applied a strategy to speed-up the investigation of crimes targeted to tourists. Botswana's unique strategy there-in includes awareness campaigns about strict gun control laws while Tanzania's unique strategy was an establishment of a special unit responsible for tourism within the police department and engagement of once-off special operations to protect tourists.

Table 1. *Tourist Safety and Security Strategies Analysis*

Strategies implemented by Mauritius, Botswana, Tanzania, and Egypt	Mauritius	Botswana	Tanzania	Egypt
Installation of surveillance cameras and other technological security systems in key tourism areas	X	X		X
Collaborations with the public community to fight tourism crimes		X	X	X
Move towards smart cities and technopoles and keeping an eye to technological developments that improve tourists' safety	X			X
Increased police presence near key tourism zones	X	X		
Establishments of safety laws that guide the hotel industry	X	X		
Engagement of civil aviation to fight tourism-related crimes			X	X
Speeding investigation of crimes targeted to tourists	X			
Awareness campaigns about strict gun control laws		X		
Establishment of a special unit responsible for tourism within the police department			X	
Once-off special operations to protect tourists			X	
Injecting heavy financial resources in tourists' safety and security				X
Purchase of new scanner and detectors				X
Increase number of security workers in the tourism sector and deploying more police dogs				X
High presence of the armed forces in high-risk destinations				X
Improvement of professionalism in the police service for tourism-related crimes				X

Source: Researcher's own compilation.

Egypt's unique strategies included injecting heavy financial resources in tourists' safety and security, purchasing of new scanners and detectors, increasing numbers of security workers in the tourism sector, high presence of the armed forces in high-risk destinations, deploying more police dogs, and improving professionalism in the police service for tourism-related crimes.

Conclusions and Recommendations

From the results, it can be learned that government intervention plays a major role in ensuring tourist safety and security. The government role includes establishing collaborations with the general public and the private sector, investing in equipment such as cameras and technological security systems, police engagement in key tourism areas, development of tourism related safety and security laws. The results also highlight that countries have established different measures towards promoting safety and security in tourism destinations. Government agencies such as the civil aviation and the police force are identified as strategic partners towards improving tourist safety and security. It appears that massive financial resources are a necessity towards building a safe and secure

environment for tourists, for example, investment in modern technologies such as cameras.

Policy Recommendations

Short Term
- Government and private sector to form collaborations with the public community to fight tourism crimes as it is the responsibility of all stakeholders to fight tourism crimes.
- Government and private sector to keep an eye on developments that improve tourists' safety.
- Government to coordinate efforts to increase police presence near key tourism zones as this would restore tourists' confidence and ease travelling around the country.
- Government to engage the civil aviation to fight tourism-related crimes and equip this unit with appropriate resources as this is the tourists' first point of entry.
- Police to speed investigation of crimes targeted to tourists as this would restore tourists' confidence in the destination the system.

Medium-Term
- Government to install surveillance cameras and other technological security systems in key tourism areas and steer a move towards smart cities and technopoles.
- Government to establish safety laws that guide the hotel industry as these are potential crime targeted areas.
- Government to inject heavy financial resources in tourists' safety and security;
- Government to device measures to improve professionalism in the police service for tourism-related crimes.
- Private sector to increase number of security workers in tourism business sector to ensure tourists security.

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