IMPACTOUR
IMproving Sustainable Development Policies and PrActices to assess, diversify and foster Cultural TOURism in European regions and areas

D1.3 - Identification of Tools for Cultural Tourism Impact Assessment
Final

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Abstract

The Deliverable addresses a knowledge gap regarding suitable methods and data sources to measure the impact of cultural tourism. Rapid developments are also taking place around (1) mobile positioning data, (2) World Wide Web data, (3) data on sharing and collaborative economy and (4) passenger data. For IMPACTOUR, it is recommended to explore the use of mobile positioning data, but at the same time, there are considerable barriers. User-generated big data from social media, web searches and website visits constitutes another promising data source as it is often publicly available in real time and has low usage barriers. Special attention should be paid to data in sharing and collaborative economy.

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Further Information

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Project Partners

For full details of partners go to www.impactour.eu/partners

Executive Summary

Cultural tourism, which accounts for some 40% of all the international tourism arrivals, has been recognized as a driver of growth for jobs, economic development, intercultural understanding, and social development in Europe. The objective of the current Deliverable is to address the knowledge gap regarding suitable methods and data sources to measure the impacts of cultural tourism. It addresses various data sources comprehensively, but foremost, aims to develop insights and practical guidelines regarding the IMPACTOUR methodology and data sources which will be explored in further Work Packages.

Major changes are currently taking place in the fields of policy monitoring and evaluation and the use of data and tools generally. Specifically, these changes include: (1) The importance of evidence has increased considerably in policy planning, implementation and evaluation, (2) there is unprecedented availability of open and big data, and (3) there are rapid developments in intelligence gathering and the application of analytical tools.

Such trends are also taking place in the field of tourism, and the roles of data science, and open and big data analytics are becoming increasingly important. Traditional surveys are already being complemented with other data sources, while in the long run the role of surveys will diminish, and the role of other data sources will continue to increase. New sources of data and analytical tools make it possible to process the immense volume of information, work with data not previously available, achieve (close to) the real-time synchronisation of sources and carry out analyses on a more detailed level. The importance of predictive analytics is also on the rise.

Overall, emerging tools for cultural tourism impact assessment seem to be centred around four key domains, (1) Mobile Positioning Data, (2) World Wide Web Data, (3) Data on Sharing and Collaborative Economy and (4) Passenger Data. However, the developments are accompanied with challenges related to the co-ordination between different stakeholders, data issues (access, complexity, objectivity, quality) and competencies. Access to proprietary data is particularly a constraint and regulation of the access to such (anonymised) data for public purposes is likely to remain a subject for debate in the years to come.

As input to this report, 15 IMPACTOUR pilots described their data use practices, giving examples of how they use different data sources for assessing the impacts of tourism. They also highlighted the barriers and challenges of using innovative data sources in tourism management.

Most IMPACTOUR pilots rely heavily on traditional data sources (such as visitor surveys) in monitoring and assessing the impacts of tourism. In many cases, pilots receive relevant data from other data providers (such as relevant public tourism management organisations, and Chambers of Commerce), rather than collecting the data on their own. The use of more advanced tools is generally limited. Still, most pilots have started to use social media data to some degree, although social media still tends to be used more for marketing than for analysis and impact assessment purposes. Only a few pilots have tested the use of mobile positioning data, road sensors, and data on collaborative and sharing economy for assessing the impacts of tourism.

Despite the IMPACTOUR pilots' interest in integrating some of the new tools into tourism management, the use of non-conventional data sources is regarded as having substantial challenges and barriers. The most frequently mentioned impediment is privacy regulations (especially limiting the use of Mobile Positioning Data). Also, smaller tourism destinations'

awareness of new tools and their application is generally limited. Several pilots referred to their limited data analysis capabilities, which often relate to human and financial resource constraints, particularly in smaller localities. There is also high fragmentation of data sources and problems with the comparability and compatibility of data aggregated from different sources. This suggests the need for greater efforts for the standardization and interoperability of systems and tools across regions and country borders. In many cases, relevant data is owned by different actors, often private parties, who may require fees in return for access to their data. This creates usage barriers for tourism organizations with fewer resources. Lastly, even if data are available, data quality may be an issue and pilots expressed caution about using incomplete data due to possible biases in the analysis.

The previous results show the necessity for an innovative and easy-to-use methodology with corresponding tools to measure and assess the impact of cultural tourism. The tool developed within the IMPACTOUR project is aimed at providing cultural tourism stakeholders with strategic guidance so that policies and practices on cultural tourism can be improved.

Derived from this deliverable's results, the first step in the development of the IMPACTOUR methodology and tools should be to develop a concrete definition of cultural tourism and increase awareness around that definition. It is also recommended to consider measurement standards as the objective is to develop a tool for comparative analysis. It is also recommended that work regarding the IMPACTOUR methodology should also be aligned with on-going work taking place in the statistical offices and national tourism development agencies, especially as it relates to the novel tools developed in this project

Considering the immense volume of tourism related data, the role of the IMPACTOUR methodology should first and foremost be a data connector – on the basis that the indicator system developed various data sources that are assessed for relevance, quality, accessibility and the competencies to process the data and to understand how to assess the (negative/positive) impact that certain level of cultural tourism has or could have on regions. Accessibility and competence related issues are particularly important, considering the relatively short timeframe of the project.

Regarding data sources that will be used by IMPACTOUR methodology, it is recommended to explore the use of mobile positioning data. Due to the widespread use of mobile phones and the fact that standardised data is collected automatically, it has been identified as a valuable source to analyse tourism patterns. Next to technical development, particular attention should be paid to the key challenge of accessing and sharing data. Difficulties in access to data can arise from (inter)national regulations and/or potential unwillingness of network operators to share the data.

User-generated big data from social media, web searches, and website visits constitutes another promising data source for monitoring and planning cultural tourism. Such data can be used for analysing tourism flows and understanding how visitors perceive and use tourism attractions. As online big data is often public, available in real time, and freely accessible online, this data source has low usage barriers in terms of access and legal restrictions.

One of the recent trends that impacts tourism generally, and cultural tourism more specifically, is related to the rapid growth of the sharing and collaborative economy, but the use of such data is underused in tourism governance. Such data from key players is available whether directly or indirectly; there are numerous academic publications available with methodological guidelines and, as the feedback from cultural tourism experts and the participating regions indicated, there are attempts to use this data in tourism governance. It

is particularly interesting if data from sharing and collaborative economy is linked with official (open) data sources.

Other data sources, such as the use of sensors (traffic sensors, energy meters, etc.) are technically (requiring infrastructure, interconnection of registries) and legally even more challenging and carry lower benefits.

In the preparation of the Deliverable, an extensive literature review was carried out. The objective of the literature review was to identify the most relevant, influential and up-to-date academic and policy-relevant sources dealing with methods and data sources to measure the impacts of cultural tourism, both theoretically as well as empirically. Empirical feedback was also gathered from the regional tourism development organisations (included directly or indirectly, as external piloting partners, in the consortium). 15 IMPACTOUR pilots participated in the study and reported their use of other novel data and/or tools for assessing the impacts of cultural tourism in the region, the key challenges in using novel data sources/tools, or barriers that have prevented pilots from introducing such tools. The findings were discussed with the project partners and elaborated further on the basis of the feedback.

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