

# METHODOLOGY FOR MEASURING THE POTENTIAL OF A TOURISM DESTINATION IN RELATION TO SUSTAINABLE LOCAL TOURISM PRODUCT DEVELOPMENT

LUCIE PLZÁKOVÁ<sup>a,\*</sup>, ŠÁRKA TITTELBACHOVÁ<sup>b</sup>

<sup>a</sup> Czech Technical University in Prague, Masaryk Institute of Advanced Studies, Kolejná 2637/2a, 160 00 Prague 6 – Dejvice, Czech Republic

<sup>b</sup> Metropolitan University in Prague, Department of Tourism, Dubečská 900/10, 100 00 Praha 10 – Strašnice, Czech Republic

\* corresponding author: lucie.plzakova@cvut.cz

**ABSTRACT.** Tourism is very strongly associated with the potential of the area, including the society, in which the tourism activities take place. This potential is often fragmented and it depends on the skills of local actors, stakeholders, and tourism management structures to discover and connect it effectively. And it does not matter whether the potential is tangible or intangible, natural or cultural. The potential of each territory is unique and needs to be summarized, measured, evaluated, and categorized for its effective and sustainable use.

This article presents the first part of a methodology for the creation of a local tourism product focusing on the measurement of potential. The methods used in this process are based on decision analysis and process management methods. The methodology is addressed to all tourism actors in each destination, in particular managers of destination management organizations, local authorities, or other initiating entities. The Ministry of Regional Development certified the Methodology for the creation of a local tourism product and recommended its use to municipalities and tourism destinations.

**KEYWORDS:** Tourism, tourism destination, measuring of the potential, local tourism product.

## 1. INTRODUCTION

To illustrate the importance of the tourism sector, it has long been the third fastest growing economic sector in the world. The World Tourism Organization (UNWTO) reports that the number of international arrivals increased 56 times between 1950 and 2018. The number of international tourist arrivals worldwide grew by 4% in 2019 to reach 1.5 billion. While the year-on-year growth rate declined (against 7% and 6% in the previous two years), it was still a growing sector with an impact on the global economy as a share of 10.4% of global GDP (USD 10 trillion) in 2019. Tourism has been affected particularly hard by the COVID-19 pandemic, with international arrivals falling by 73% in 2020 [1]. Compared to other crises (e.g., oil crises, the global financial crisis, the Gulf War), there has never been such a huge drop in tourism as in 2020. In 2022, the whole world was expecting a recovery of the global economy and also a recovery of tourism to a level comparable to 2019. However, this did not happen. There are several reasons for this, including the long-standing restrictions and border closures in Asian countries, inflation, rising energy and gas prices, and last but not least, the war in Ukraine, which is having the greatest impact on tourism, especially in Europe.

The rapid growth in tourism demand prior to 2019 has placed an excessive strain on environmental resources and cultural assets, such as physical attrac-

tions or local monuments. This has been compounded by the affordability of travel, due to factors such as the emergence of low-cost airlines, the development of information and communication technologies, the automation and later robotization of processes, the expansion of accommodations based on sharing or collaboration, and the orientation of customers on speed, and experiences and their sharing in real time, leading to the phenomenon of “over-tourism”. Tourism destinations have been overloaded, the environment for residents has been affected, and many cities and places around the world have begun to fight back against this phenomenon. Examples are the big cities of Venice, Berlin, and Barcelona, as well as destinations of a local nature such as Hallstatt. According to Pearce [2], not only residents and businesses can be affected by overcrowded places, but ultimately tourists themselves can be too, if the dissatisfaction of residents reaches its limit and escalates into outright aggression. Such a situation reveals that the potential of the destination is at its limits or is not being properly exploited.

Tourism potential is a set of territorial conditions and prerequisites for tourism development, which creates a complex multidisciplinary system. The system includes aspects of the natural environment, cultural and historical heritage values, and the manifestations of current activities of human society. Tourism potential is very important because an area must have certain conditions (prerequisites, factors) to become a tourism destination. The World Tourism Organiza-

tion defines a tourism destination as a physical space where the tourist spends at least one night [3].

In order to optimally the potential, it is necessary to know how to work with it. This means to know, to be able to measure, to evaluate, and to classify the potential. Only then is the potential ready to become a part of a sustainable tourism product. This paper deals with setting up the methodology for measuring the potential of a tourism destination in relation to sustainable local development.

## 2. MATERIALS AND METHODS

### 2.1. TOURISM IN REGIONAL/LOCAL DEVELOPMENT THEORIES

Resource-based theory states that a firm's competitive position depends on a unique set of resources and the relationships between them [4, 5]. If we apply this approach to a tourism destination, we can state that the destination's potential constitutes the competitive advantage of each unique destination through the creation of the key tourism product.

In terms of regional development, a neo-endogenous approach (i.e., an approach based precisely on the exploitation of local resources) will be employed. Neo-endogenous regional development has been related very often to rural areas development. In the case of tourism, even if it is also about local products in cities, the neo-endogenous approach fits well, as the basic characteristic of tourism is that "tourism is tied to its place", meaning to the potential of a particular territory. It's more about neo-endogenous thinking in different contexts [6]. The concepts of endogenous and neo-endogenous development are based on the principles of subsidiarity, participation, and the use of the region's internal potential in a bottom-up approach. Neo-endogenous development, based on the balanced use of local resources and/or traditions, generates economic growth, increases regional productivity, and counters the trend towards uniformity by embracing a diversity of cultures, social laws, technologies, and knowledge. Within the neo-endogenous concept of regional development, a new strand is built on knowledge, namely the theory of learning regions, where knowledge is the most important asset. According to Skokan [7], a learning region is "a more organized collaboration of a broader range of civil society organizations, firms, institutions, and public authorities that are embedded in social and regional structures". Florida [8] makes an interesting point about the relationship between the learning region approach and sharing when he notes the need to connect and share data, information, and actors in the region's productive infrastructure. This is the only way to achieve a learning process.

The local focus underscored in the neo-endogenous approach calls for local knowledge, local resources, and the engagement of local people to be central to development processes [9]. Tourism development is

built on the unique potential of a place combined with human and social capital. As each individual is part of the socio-cultural potential and is also the one who activates and transforms this potential, the role of the individual in local/regional development is crucial in relation to sustainable tourism development. The consideration of the individual and/or the service sector has generally been historically neglected in regional development theories. A turning point in the perception of tourism as part of regional development occurred in the 1990s and early 2000s, when the importance of tourism to the global economy was demonstrated through the Tourism Satellite Account.

Conceptualizing tourism within regional development theories is highly complex. The goods offered in the tourism market are non-stackable, they cannot be relocated (tourism is locally bound to natural and socio-cultural potential), and to consume them the consumer (visitor, tourist) must travel from one region to another with the expectation that "something" non-transferable and otherwise non-tradable will become tradable [10]. Moreover, consumption cannot be completely separated from that of the local population. Luzzi and Flückiger [11] state that "tourism is rather a set of cross-cutting activities that are available for consumption by local residents and visitors participate in that consumption". In essence, tourism offers a set of services with a differentiated product created based on the uniqueness of each destination.

The approach of neo-endogenous regional development and also learning regions are reflected in the proposed methodology introduced below.

### 2.2. DESTINATION POTENTIAL

The potential of the destination is the default value of each destination that should know its potential, it should be able to evaluate and use it. When assessing the potential for desalination, three main groups of factors are taken into account:

- (a) localization factors such as the attractiveness of the local environment and landscapes or local cultural values and remarkableness;
- (b) realization factors such as transport prerequisites (availability, or time achievability) and material technical prerequisites that express the amenity of the area with accommodation, catering, sports, entertainment, and other facilities; and
- (c) selective factors or conditions such as the level of destination management, the level of cooperation between individual entities, the perception of the importance of tourism policy, which depends on the level of public support of tourism, and the income situation of potential visitors (objective stimulation factors), as well as psychological and marketing factors such as the position of the evaluated territory against the competition, its image for the desired target groups, and the ability to fulfil their wishes and expectations [12].

Mazur et al. [13] developed a synthetic index of environmental and landscape values for tourism development, noting that their methodology is only one of many possible measures for assessing the current state of tourism development. On the other hand, there are no methodologies to measure the whole potential of a destination, not just one part (spatial, cultural, natural, etc.). Such a methodology is missing.

### 2.3. METHODS AND DATA

Decision analysis methods (e.g., Saaty's method for determining weights), management strategies such as brainstorming, process management, and sociological research methods and techniques, namely questionnaires and in-depth interviews, were used to meet the objective of the article.

Saaty [14] introduced a method for deriving "priority weights" associated with a set of mutually exclusive alternatives. Priority weights – or simply priorities – are positive numbers that add up to one, reflecting the importance of alternatives judged by different criteria. This imaginative technique has found various applications in fields such as marketing, health planning, transportation studies, and personnel studies [15]. Details of the method are described in Saaty's work [16]. Saaty's method is used in Table 3.

Sociological techniques of quantitative and also qualitative research were used. Two questionnaire surveys were conducted in 2021 in six countries: the Czech Republic, Poland, Latvia, Bulgaria, Croatia, and Turkey. The first survey focused on destination management organizations (DMO); responses were received from 56 organizations, with the following main findings in relation to measuring and working with territory potential:

- DMOs consider potential assessment as a key activity; however, this activity is very often outsourced by the organizations responsible for tourism management in the territory. This is due to the lack of competencies, and moreover, external processing is certainly more expensive than an employee equipped with their own competences.
- The organizations responsible for tourism management at the regional level lack a methodology for assessing and categorizing potential.

Based on the second survey of 654 respondents (again from the above-mentioned countries), service providers pointed out that almost one-fifth of them do not use any potential of the destination, while 82 % make use of the potential of the destination for their business, mostly its natural and cultural tangible potential.

In-depth interviews were used to determine the extent to which the potential (in the context of a project linked to the Czech tradition of fishing and fish farming, which means natural potential) is being managed by stakeholders, such as destination management organizations, service providers, public institutions, and

local authorities. Twenty-four stakeholders were interviewed in the tourism sector in the Czech Republic, with the finding that they do not work conceptually with the destination potential.

All of these findings led to the need to set up a tool for measuring the potential of the area (whether or not it is a tourist destination) and its subsequent use, so that stakeholders can work with it conceptually. This should bring more control over the use of the destination's potential, reduce overcrowding in certain parts of the destination, and on the contrary, exploit the potential that has not yet been used. In this paper, we will only discuss the first part of the local tourism development process, namely the part that focuses on summarizing, evaluating, assessing, and classifying the potential. The other steps leading to the complete development of a sustainable local tourism product (e.g., learning groups, conceptualization, indicator setting, auditing, and innovation) are not the subject of this article.

### 3. RESULTS

Identifying and assessing potential is a key element in the process of creating a sustainable local tourism product. This activity should be undertaken by any tourism destination aiming to become a competitive and sustainable tourism destination in the national and/or international market.

Summarizing and sorting the potential is the first step in the whole process, and it is built on the basic components of a successful tourism destination. Potential is assessed based on six key attributes for creating a tourism product in a destination:

- **USP and Authenticity** – The unique selling proposition (USP) represents "what our product or brand has that other do not". This is the unique characteristic of a product or brand that differentiates it from competitors and is also relevant to the target audience. The USP is the main reason to visit a destination. At the same time, authenticity is linked to this. That is, what we have in our territory that relates both to the territory itself and/or to the traditions, history, culture, and way of life of the local people.
- **Accessibility** – The attribute of accessibility tells us whether the potential we have is accessible, in terms of both time (seasonality, opening hours for the public) and place (there is a road leading to it, it is accessible to wheelchairs, access to the property is allowed, etc.). We are therefore assessing the accessibility to visitors and the quality of this access (absence of barriers).
- **The range of services related to the potential (entities offering basic services)** – This includes accommodation, catering, and transport. It is the presence of these providers and the services they offer which, by their existence, make the potential

Potential assessment		USP	Availability		Scope of services (which are linked to potential)			Management system (where potential occurs)			Total max 90 points	Final valuation (result from Table 3)			
			time	local	accommodation	boarding	transport to the region	existence and quality of destination management	scope of networking	marketing strategy					
Potential	Natural	Tangible	A1	A <sub>1x1</sub>	A <sub>1x2</sub>	A <sub>1x3</sub>	A <sub>1x4</sub>	A <sub>1x5</sub>	A <sub>1x6</sub>	A <sub>1x7</sub>	A <sub>1x8</sub>	A <sub>1x9</sub>	∑AX	A1 value	
			A2												
			A..												
	Cultural	Tangible	B1												
			B2												
			B..												
	Intangible	B..													
		Bn													

TABLE 1. Identification and assessment of potential.

Point range	Description of assessment
≤ 1.9	meaningless; very low; very inadequate; there is no potential
2–3.9	minor; low(s); inadequate; inoperative; low quality
4–5.9	moderately significant; medium; adequately sufficient; functional; average quality
6–7.9	significant; high; rather sufficient; very functional; very high quality
8–10	very significant; very high; quite sufficient; fully functional; excellent

TABLE 2. Potential assessment process. Each item is worth 10 points. Total 90 pts.

Potential evaluation	Total points (from the previous table)	Weight	FINAL VALUE (points * weight)
USP and authenticity	$A_1x_1$	0.3	
Availability (total)	$A_1x_2 + A_1x_3$	0.25	
Scope of services (total)	$A_1x_4 + A_1x_5 + A_1x_6$	0.15	
DMO – existence, quality	$A_1x_7$	0.1	
Scope of networking	$A_1x_8$	0.12	
Marketing strategy	$A_1x_9$	0.08	
TOTAL	$\sum A_1X_n$		A1 value

TABLE 3. Valuation of potential.

exploitable. Here we assess the existence of the provider and the quality of the services.

- DMOs – We assess the very existence and quality (competence) of destination management organizations (DMOs) in the territory on which we carry out the summarization and evaluation of the potential for the exploitation of local product creation.
- Processes or scope of networking – This entails setting up cooperation, communication, and coordination between all public administration entities, business entities, non-profit organizations, and local residents in the territory.
- Marketing strategy – This sets the framework for the product under consideration (segmentation, demand, product portfolio), including realistic sources of funding: SMART objectives, evaluation methods, and tactics. Here we evaluate whether there is a marketing strategy for the destination (territory) where we are setting the local tourism product (the destination itself or the wider destination to which our territory belongs). We evaluate the existence of the strategy and its quality (whether it is implemented, monitored, or evaluated).

First, the potential of the place/destination/region is summarized and then sorted into two basic categories: natural potential (tangible and intangible) and cultural potential (tangible and intangible). Furthermore, tourism services (transport, accommodation, and catering) and the tourism management system and its quality are identified. For this step, we will use Table 1, which we will also work with in the following step, namely the assessment of the potential.

The assessment takes place in two steps. The first step is to assign each attribute for the selected potential a score value from 0 to 10. The assignment of the

points will be done in accordance with Table 2.

The second step is to rate each potential item and then assign weights to it. The weights are used to differentiate the importance of the above-mentioned key attributes for creating a local product. The weights for each attribute are recorded in Table 3, where we already get the final valuation of the potential. For each potential, the valuation must be calculated separately, with the final value entered in the last column of Table 1, where we can then sort and compare all of the potentials.

Based on the assessment of the potential, we gained an overview of the potential available in the area and its value for creating a local product. Next comes the step of categorizing it, which means assessing whether the potential is suitable for inclusion in the local product creation process. The categorization of the potential is based on Table 4.

According to the result of the summarization, sorting, assessment, and valuation, we classify the potential into four categories:

- Category 1 – Unusable potential is not exploitable for local product development. We discard such potential from the process and do not work with it further.
- Category 2 – Sleeping potential. In this category, we classify potential that shows strong barriers to use it for local product development (ownership and related activities not intended for tourism participants, lack of funding to make the attraction operational, etc.).
- Category 3 – Exploitable potential with limitations. In this category, we include the potential usable once the conditions for exploitation are met (the completion of the renovation, a willingness to open

Total points scored	Categories of potential
≤ 3.1	Unusable potential
3.2–5.2	Sleeping potential
5.3–8.2	Exploitable potential with limitations
8.3–15.5	Potential for immediate use

\* If the value is higher than 11, BEWARE of capacity!

TABLE 4. Categorization of potential.

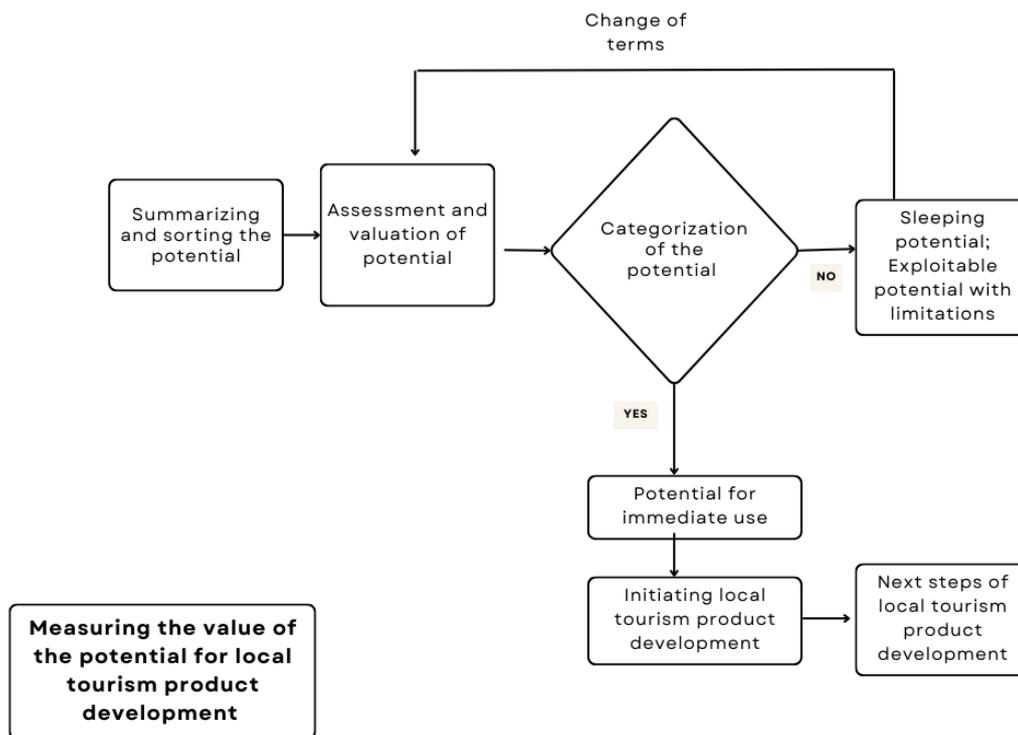


FIGURE 1. Process of measuring the value of the potential for local tourism product development.

the facilities, the creation of an offer for visitors, etc.).

- Category 4 – Potential for immediate use. In this category, we classify the potential that can be used immediately in the process of local product development.

The whole process of measuring the potential is illustrated in Figure 1. Furthermore, the potential serves as an input to the creation of a local tourism product with subsequent phases of the process: definition of the local product concept, implementation, audit and evaluation, and innovation, as previously mentioned. Throughout the process, a local learning group is established, involving all stakeholders, including local residents.

#### 4. CONCLUSIONS

The methodology for the development of local tourism products, including its initial phase for measuring the value of local potential (which is the subject of this paper) has been piloted in the tourism destination of Czech Canada and successfully implemented in

the destination of the Moravian-Silesian Region in the Czech Republic, as well as in other 5 countries: Poland, Bulgaria, Latvia, Turkey, and Croatia. Until recently, this region was largely underdeveloped in terms of tourism, with neither foreign nor domestic visitors showing interest. A fundamental change has occurred as a result of the development of a regional and local tourism management system in the region in the form of destination management. The whole community – residents, public regional and local administration, cultural institutions, non-profit organizations, and business entities – has worked for many years on the process of developing, creating, and implementing a tourism product based on industrial heritage. Using the proposed methodology for measuring potential, the components of potential were identified on which the highly successful tourism product called Technoroute was built. Technoroute – the Industrial Heritage Trail – is a key product of the North Moravia and Silesia tourism region, and it introduces visitors to unique industrial heritage such as mines, open pits, mills, and defunct factories. The key product contains over 30 activities and 28 entities from the commer-

cial and non-commercial spheres that cooperate on it. However, it is a living mechanism that may have a lower degree of variability depending on visitor demand and available supply. The product was initially launched in 2012 and has been dynamically developed and improved since then. In 2019, 1.7 million tourists visited the route or one of its attractions, with a direct economic benefit of USD 273 million.

The above example shows that if the potential of a place is properly harnessed, even a region affected by industry can become a successful key tourism product by telling its stories; conveying pride, knowledge, tastes, and smells; and generating a notable monetary benefit.

#### ACKNOWLEDGEMENTS

Results from two projects were used to write this article: DEMINA PROJECT: Project Innovation and Continuing Education in Destination Management, no. 2020-1-CZ01-KA202-078343, Erasmus+ programme of the European Union and Cultural tradition of Czech fishing in the light of its use in tourism and gastronomy, NAKI: DG18P02OVV057.

#### REFERENCES

- [1] World Tourism Organization – UNWTO. World tourism barometer, 2022. [2023-06-10]. <https://www.unwto.org/unwto-world-tourism-barometer-data>
- [2] P. L. Pearce. Limiting overtourism. The desirable new behaviours of the smart tourist. In *Tourism Intelligence Forum (t-Forum) Global Exchange Conference 2018*. Palma de Mallorca, 2018.
- [3] World Tourism Organization. *A practical guide to tourism destination management*. World Tourism Organization, Madrid, Spain, 2007.
- [4] K. M. Eisenhardt, J. A. Martin. Dynamic capabilities: what are they? *Strategic Management Journal* **21**(10–11):1105–1121, 2000. [https://doi.org/10.1002/1097-0266\(200010/11\)21:10/11<1105::aid-smj133>3.0.co;2-e](https://doi.org/10.1002/1097-0266(200010/11)21:10/11<1105::aid-smj133>3.0.co;2-e)
- [5] A. Melián-González, J. M. García-Falcón. Competitive potential of tourism in destinations. *Annals of Tourism Research* **30**(3):720–740, 2003. [https://doi.org/10.1016/s0160-7383\(03\)00047-1](https://doi.org/10.1016/s0160-7383(03)00047-1)
- [6] M. Scott, N. Gallent, M. Gkartzios (eds.). *The Routledge companion to rural planning*. Routledge, London, England, 2020.
- [7] K. Skokan. Systémy inovací v regionálním rozvoji. *Ekonomická revue* **8**(4):12–25, 2005. [2023-06-04]. [https://mpra.ub.uni-muenchen.de/12374/1/MPRA\\_paper\\_12374.pdf](https://mpra.ub.uni-muenchen.de/12374/1/MPRA_paper_12374.pdf)
- [8] R. Florida. Toward the learning region. *Futures* **27**(5):527–536, 1995. [https://doi.org/10.1016/0016-3287\(95\)00021-n](https://doi.org/10.1016/0016-3287(95)00021-n)
- [9] G. Bosworth, J. Atterton. Entrepreneurial in-migration and neoendogenous rural development. *Rural Sociology* **77**(2):254–279, 2012. <https://doi.org/10.1111/j.1549-0831.2012.00079.x>
- [10] B. R. Hazari, P. M. Sgro (eds.). *Tourism, Trade and National Welfare*. Contributions to Economic Analysis, Vol. 265. Emerald Group Publishing Limited, 2004. ISBN 978-1-84950-825-4. [https://doi.org/10.1108/s0573-8555\(2004\)265](https://doi.org/10.1108/s0573-8555(2004)265)
- [11] G. Ferro Luzzi, Y. Flückiger. Tourism and international trade: Introduction. *Pacific Economic Review* **8**(3):239–243, 2003. <https://doi.org/10.1111/j.1468-0106.2003.00224.x>
- [12] L. PlzÁková, Š. Tittelbachová, I. Anev, et al. Model and methodology for destination management and audit, 2022. DEMINA PROJECT: Project Innovation and Continuing Education in Destination Management, no. 2020-1-CZ01-KA202-078343, Erasmus+ programme of the European Union. [2023-06-10]. <http://demina.cz/wp-content/uploads/2023/02/Model-and-Methodology-for-Destination-Management-and-Audit.pdf>
- [13] M. Mazur, M. Bednarek-Szczepańska, J. Bański, D. Mazurek. Measuring environmental and landscape-related potential for tourism development in rural areas and assessment of its co-occurrence with tourist movement: The case of Poland. *Moravian Geographical Reports* **29**(2):101–112, 2021. <https://doi.org/10.2478/mgr-2021-0009>
- [14] T. L. Saaty. A scaling method for priorities in hierarchical structures. *Journal of Mathematical Psychology* **15**(3):234–281, 1977. [https://doi.org/10.1016/0022-2496\(77\)90033-5](https://doi.org/10.1016/0022-2496(77)90033-5)
- [15] P. de Jong. A statistical approach to Saaty’s scaling method for priorities. *Journal of Mathematical Psychology* **28**(4):467–478, 1984. [https://doi.org/10.1016/0022-2496\(84\)90013-0](https://doi.org/10.1016/0022-2496(84)90013-0)
- [16] T. L. Saaty. *Analytic hierarchy process*. McGraw-Hill International Book Company, 1980. ISBN 9780070543713.