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Title of the dissertation: A Conceptual Model of Integrating Mobile City Games into the Process of Shaping the Brand Strategy of a Tourist City

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Abstract

The subject of this dissertation is the manner in which mobile city games—as a form of interactive narrative and user engagement—affect the perception of tourist cities, as well as their potential role in shaping the brand strategy of tourist cities. The dissertation is situated within the discipline of management and quality sciences and addresses issues related to place marketing, urban tourism, and research on the acceptance of digital technologies. The point of departure for the analysis is the assumption that contemporary tourist cities operate under conditions of intensified competition, and that their attractiveness is increasingly shaped not only by material resources and infrastructure, but also by experiences, emotions, and interactive forms of engagement with city brand audiences, particularly tourists.

In the academic literature, the city brand is conceptualized as a complex construct encompassing functional as well as symbolic, social, and emotional dimensions. Despite the growing importance of city branding, practices related to shaping the brand strategies of tourist cities are often fragmented, short-term, or predominantly promotional in nature, and the tools employed do not always keep pace with dynamic socio-technological changes. This is particularly evident in the context of the development of mobile technologies and evolving patterns of urban tourism consumption, in which digital experiences, personalization, and active audience participation play an increasingly significant role.

One of the digital tools that may respond to these challenges is mobile city games, understood as applications that employ gamification mechanisms, narrative structures, and elements of urban space to engage users in the exploration of the city. Despite the increasing

popularity of such solutions in municipal and marketing practice, their role in shaping the brand strategy of a tourist city has not yet been systematically and comprehensively examined in the academic literature. The identified research gap concerns both the lack of integrated analyses of urban development strategies with regard to the use of mobile city games and the limited knowledge of the factors influencing tourists' acceptance and use of these tools.

The main research problem addressed in this dissertation concerns how the potential of mobile city games can be utilized in the process of shaping the brand strategy of a tourist city. In response to this problem, the principal objective of the study was formulated as the identification and description of the possibilities for implementing mobile city games (MCGs-MGM) in the process of shaping the brand strategy of a tourist city. This overarching objective was further elaborated through theoretical, methodological, and empirical goals.

The theoretical objective involves the identification of key elements shaping the brand of a tourist city through a review of the literature and an analysis of development strategies. The methodological objective focuses on identifying the relationships between factors influencing the acceptance and use of MCGs, based on the author's proprietary UTAUT-MGM model. The empirical objective is the development of an original conceptual model for integrating mobile city games into the process of shaping the brand strategy of a tourist city (the IMG-MMT Model). In addition, the dissertation formulates seven auxiliary objectives (AO1–AO7) and six research questions (RQ1–RQ6), which enable a multidimensional examination of the role of the tourist as a stakeholder, gamification mechanisms, and the analysis of strategic documents of Polish cities.

The dissertation adopts a mixed-methods approach, consistent with the paradigm of epistemological pluralism. It is assumed that the complexity of phenomena related to city brand management and tourist behavior necessitates the integration of diverse cognitive perspectives, research methods, and data sources. The application of methodological triangulation enabled a more comprehensive understanding of the phenomenon under investigation and enhanced the credibility of the results obtained.

The theoretical part of the dissertation includes an analysis of the concept of strategy within management sciences, the essence of brand strategy, the concept of territorial branding, and the specificity of the city brand as a particular case of place branding. Special attention is devoted to the city as a tourism product and to the conditions shaping the brand strategy of a tourist city. On the basis of a systematic literature review, the key components of a tourist city brand strategy were identified, taking into account both internal factors, such as place identity

and local resources, and external factors, including tourists' expectations, technological trends, and institutional conditions.

In the subsequent part of the theoretical section, the dissertation focuses on tourists as key external stakeholders of the tourist city brand. The discussion covers forms of urban tourism, the marketing segmentation of tourists, types of activities undertaken in urban space, and the role of tourist experiences in the process of shaping the city brand. Particular attention is devoted to the analysis of gamification as a tool for engaging tourists, based on motivational, emotional, and cognitive mechanisms. It is argued that gamification may serve not only a promotional function, but also educational, narrative, and experiential ones, thereby fostering the development of relationships between the city and its audiences.

The methodological part of the dissertation provides a detailed description of the research methods employed. The qualitative research includes a content analysis of 61 development strategies of Polish tourist cities, selected on the basis of the number of year-round accommodation facilities, as well as an analysis of 116 mobile city games operating in 36 cities. The analysis was conducted using classical content analysis and exploratory text analysis (text mining), supported by the NVivo and VOSviewer software. This approach made it possible to identify dominant themes, contexts, and ways of operationalizing the city brand concept in strategic documents, as well as to characterize the functions, narratives, and mechanisms used in mobile city games.

The quantitative research was based on an extended, author-developed UTAUT-MGM model derived from the Unified Theory of Acceptance and Use of Technology (UTAUT 2). The model incorporates variables such as effort expectancy, performance expectancy, social influence (including both significant others and municipal tourist information services), hedonic motivation, and facilitating conditions at both the personal and city levels. Behavioral intention serves as the mediating variable, while actual use of mobile city games constitutes the dependent variable. The survey was conducted using the CAWI method on a nationwide sample of 1,063 respondents who met the criterion of participation in urban tourism in Poland within the year preceding the study. Data analysis was carried out using partial least squares structural equation modeling (PLS-SEM) with the SmartPLS 4 software.

The results of the empirical research indicate that behavioral intention has a significant and positive effect on the actual use of mobile city games. The key determinants of technology acceptance were found to be perceived enjoyment, performance expectancy, and facilitating conditions, both personal and city-related. Social influence also plays an important role, particularly the role of municipal tourist information services as an institutional source of

recommendations. The analyses revealed differentiated levels of acceptance of mobile city games among tourists, which made it possible to identify user segments characterized by very low, low, moderate, and high propensity to use such solutions.

Based on the synthesis of the results of the qualitative and quantitative studies, an original conceptual model for integrating mobile city games into the process of shaping the brand strategy of a tourist city (IMGGM-MMT) was developed. Its purpose is to systematize key concepts and illustrate the logical relationships between the city brand strategy and mobile city games as narrative and experiential tools. The model comprises two complementary modules: a spatial–digital diagnosis module, referring to the identification of the city’s resources, conditions, and narratives, and a narrative–experiential implementation module, encompassing the design, testing, and deployment of mobile city games as elements of brand communication.

In the concluding part of the dissertation, both the cognitive and applied value of the research findings are emphasized. The study contributes to the development of research on city marketing and urban tourism by integrating the perspectives of strategic management, experiential marketing, and technology acceptance research. From a practical standpoint, the proposed IMGGM-MMT model may serve as a supportive tool for local government units and entities responsible for the development of urban tourism in designing innovative, engaging, and coherent city brand strategies. The dissertation also identifies research limitations related, among others, to the national context and the nature of the methods applied, and proposes directions for further research, including comparative studies and testing of the model in different cultural and institutional settings.