Monika Bachinger / Ana Tripković Marković

Destination management organisations as meta-designers: Insights from Germany and Montenegro

Abstract

DMOs increasingly find themselves managing complex socio-technological systems. They face 'wicked problems' at the point where humans and technological systems intersect. Such problems require the remit of DMOs to grow from its current status of meta-management into the new concept of meta-design. Whereas meta-management relies on strategic planning and a predictable future, meta-design takes into account unpredictable dynamics of destinations as experience production systems. The term meta-design implies designing design; it targets those structures and processes in destinations that facilitate the co-production of tourism experiences. Based on a survey in Germany and Montenegro this paper investigates whether, and to what degree, DMOs practice meta-design, what factors characterise their meta-design and what circumstances drive them to take on the task of meta-design. Results show that only a small number of DMOs in both countries practice meta-design. The DMOs who adhere most closely to such a role operate at a superordinate geographical level. Digitalisation and user-centeredness are important features of meta-design; however, DMOs realise both of these features to different degrees. Contact with service providers along with available networking resources influence DMOs to practice meta-design. Differences exist between Montenegro and Germany due to their markets and normative settings. In discussing these results, some practical recommendations and further fields of research have been formulated.

Key words: destination management; design science; meta-management; digitalisation; user-centeredness; networks

1. Introduction

Destinations are increasingly regarded as 'experience production systems' (Tussyadiah, 2014). Within these systems a great variety of factors and actors interlink (Van der Zee & Vanneste, 2015; Lemon & Verhoef 2016). Some of these factors are social, others are technical in nature (Sanders, 2002; Fischer & Herrmann, 2015). Social factors relate to the interaction that takes place between a destination and its guests and includes both co-production and user-centeredness (Sigala, 2016; Nasution, Sembada, Miliani, Resti, & Prawono, 2014; Kim & Fesenmaier, 2017). Digital technology, on the other hand, is an important technical factor for experience production (Neuhofer, Buhalis, & Ladkin, 2014; Tung & Ritchie, 2011). It not only changes destinations' opportunities for informing guests, but also enables them to create new experiences (Alizadeh & Isa, 2015; Gupta, Bakshi & Dogra, 2018). To remain competitive, destinations need to coordinate both social processes of interaction and human-technological structures of interaction (Neuhofer et al., 2014; Fesenmaier & Xiang, 2017).

Against this backdrop, destination management organisations (DMOs) find themselves confronted with highly complex, so called 'wicked problems' (Rittel & Webber, 1973). These problems arise at the

Monika Bachinger, PhD, Professor in Tourism, University of Applied Forest Sciences Rottenburg, Rottenburg, Germany; e-mail: bachinger@hs-rottenburg.de

Ana Tripković Marković, PhD, Municipality of Budva, Budva, Montenegro; e-mail: ana.markovic@budva.me

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point where technological and social spheres intercept and where complex sets of issues emerge which cannot be solved through linear rationalising (Crowley & Head, 2017). Since managerial approaches reach their limit here, it has been argued that design approaches may provide a way forward (Hevner, March, Park, & Ram, 2004; Pandza & Thorpe, 2010). When solving complex, socio-technological tasks, DMOs could, therefore, possibly rely on design approaches. Since the problems they address relate to structures and processes at a destination level, we would like to talk of DMOs referring to meta-design. Meta-design targets the shaping of complex social-technological systems on the level of destinations where guests, service providers, and digital technology interact to generate experiences.

Thus, DMOs face a transformation from their current role in meta-management to a new one in meta-design. Not all DMOs will be able to realise this transformation. We therefore wish to explore the following questions: To what degree have DMOs already taken on the task of meta-design (RQ1)? To what extent is meta-design characterised by digitalisation and user-centeredness (RQ2)? What enablers and drivers enhance the performance of DMOs in practicing meta-design (RQ3)? To answer these questions we structured this paper into three main sections. First, a conceptual framework was developed by drawing on insights from destination management research, digitalisation and user-centeredness. Second, we referred to an empirical survey. Finally, we discussed our results and deduced practical implications from both the conceptual framework and the empirical study; thus they can serve as input for DMOs and also for further research.

2. Conceptual framework

2.1. User-centeredness and digitalisation in destination management

Considering that guests do not only call for a high degree of individuality, but also exhibit an increasing diversity of preferences and tastes, the remit of the DMO has changed. Indeed, destinations disintegrate into countless numbers of guest-based experience spaces (Beritelli, Bieger, & Laesser, 2014). Briassoulis (2017) speaks of destinations as 'multiplicities'. Within these destinations, any single guest can activate different service providers, interact with different locals or use different sections of nature (Van der Zee & Vanneste, 2015). Against this backdrop, DMOs try to serve customers as individually and interactively as possible (Sigala, 2016). What these participatory structures look like, however, may vary considerably. Customers can be considered to be passive recipients of information or they can be actively involved in co-producing services or in planning new tourism products (Lemon & Verhoef, 2016). Defining the extent to which user-centeredness is practiced throughout a destination, or within a service chain, is therefore regarded as a core task of destination management (Ryglova, Rasovska, Sacha & Strojarova, 2015).

Not only human interaction, but also human-technology-interaction is increasingly playing a role in experience generation (Sigala, 2016; Tussyadiah, 2017). This not only applies to how services are produced and consumed, but also to how information on tourism products is gathered and to how service innovation takes place (Neuhofer et al., 2014). For example, digital technology supports the coordination of large numbers of touch-points and enables DMOs to seamlessly communicate with visitors; furthermore it is used to track guests' behaviour and to anticipate their future behaviour, whilst also initiating related service innovations (Fesenmaier & Xiang, 2017). However, digitalisation can take on different forms and serve different aims. Thus, digital technology can be used to better communicate with guests or even to deliver virtual products and services (Neuhofer et al., 2014). The extent to which destinations are digitalised is viewed as an integral part of a destination management's strategic choice (Fesenmaier & Xiang, 2017; Neuhofer et al., 2014).

However, the integration of user-centeredness and digitalisation into destination management can result in a variety of problems. Some issues are regularly apparent in DMOs such as financial limitations, concerns over leadership and the ability to control service providers' activities (Sainaghi 2006). Accordingly, Pike and Page (2014) stated: 'Very few DMOs have either the mandate or resources to effectively manage their destination' (p. 204). Hristov and Naumov (2015) confirm this. With regard to ICTs, in many cases DMOs dispose of staff that are unable to keep up with new developments: 'The bottleneck to DMOs' adaptation of technology rests on the e-business readiness of management and staff' (Li, Robinson, & Oriade, 2017, p. 98). Furthermore, values and political priorities can restrict DMOs regarding the introduction of user-centred digitalisation into destinations (Beritelli & Laesser, 2017). Thus, DMOs not only face internal limitations, but also external complexities.

2.2. From meta-management to meta-design

DMOs increasingly find themselves managing complex systems at the intersection of human and technological spheres. DMOs struggle with 'wicked problems' (Rittel & Webber, 1973). Other than 'tame' problems which can be solved by linear rationalising (Crowley & Head, 2017), 'wicked problems' are 'recalcitrant, undisciplined, uncontrollable and unmanageable' (Fischer, 1993, p. 175). They are value-laden (McBeth & Shanahan, 2004), contain a normative core and thus need political negotiation and network-based communication (Crowley & Head, 2017). In such situations, DMOs may refer to design approaches, which are characterised by iterative processes and feed-back-loops (Thienen, Meinel & Nicolai, 2014; Rith & Dubberly, 2006). The aim of design is to develop 'technical rules' (Bunge, 1967) or 'solution concepts' (Van Aken, 2005; Sarasvathy & Venkataraman, 2011), which are powerful enough to guide action, but rough enough to allow practitioners to adapt, vary and re-develop them (Pandza & Thrope 2010; Holmström & Ketokivi, 2009). DMOs that execute design activities determine the way their customers' journeys come into existence. They do this by shaping those structures and processes in the destination through which a great variety of actors and factors (i.e. guests, locals, tourism service providers) interact and contribute to produce an experience. Since this process of structuration covers all customer journeys that relate to a specific destination, we would like to talk about meta-design.

Meta-design, as defined here, relates to experience production at a destination level. Unlike single touch-points and individual customer journeys, meta-design at a destination level relates to the macro-structures of experience design (Güzel, 2016; Sigala, 2016). DMOs that perform meta-design create a 'higher order design' which involves 'designing design' (Fischer & Herrmann, 2015, p. 87). Seen from the tasks and contents involved, meta-design exceeds meta-management in its characteristics (Sainaghi 2006). Meta-management tends to stick to strategic planning and thus relies on a predictable future whereas meta-design takes into account unpredictable circumstances. Meta-design carried out by DMOs refers to the structures and processes within a destination that enable guests to be involved in co-designing their own customer journey: 'Meta-design provides enabling conditions for putting owners of problems in charge by defining the technical and social conditions for broad participation in design activities' (Fischer & Herrmann, 2015, p. 86). The aim is to shape communication and interaction structures and processes to enable all actors involved to co-produce tourism experiences.

3. Research setting

This study was conducted in Montenegro and Germany. Since Montenegro is much smaller in geographical size and population than Germany, only a part of Germany was considered: the federal state of Baden-Wuerttemberg, more specifically the destination 'Swabian Alb'. Swabian Alb is one of eleven

tourism regions in Baden-Wuerttemberg. It covers a total of 5,800km^2 and consists of 150 municipalities and 10 counties (Tourism BW, 2019). In 2018 Swabian Alb received 2,3 million guests (StaLa, 2019). A superordinate tourism association, the Tourismusverband Schwäbische Alb, governs the region. In addition, associations exist at both county and city levels. In total, around 45 tourist organisations, or units, exist within public administration bodies (SA, 2019). Various design interventions in the field of digitalisation and user-centeredness have recently been carried out. For example, in 2018 a state-wide competition which focussed on digitalisation was launched to identify best-practices and innovative ideas. Furthermore, digitalisation is one of the core components of the state-wide strategic tourism concept, which has recently been finalized. User-centeredness, however, has already been central to tourism policy for a long time (Baden-Württemberg [BW], 2019).

Montenegro is a south-eastern European country with 642,550 inhabitants and an area of 13,812 km^2. It consists of three regions, each of which has significantly different geographical and structural characteristics (Đurašević 2015). In 2018, Montenegro received about 2.2 million tourists and around 13 million overnights stays (Monstat, 2019). The majority of tourism turnover (approx. 90%) is generated from just one region. This is the southern area which lies on the Adriatic coast; geographically, it is the smallest region of Montenegro, but economically it is the most developed. Tourism represents 23.7% of GDP, and is Montenegro's main economic sector (World Travel & Tourism Council [WTTC], 2018). The Ministry of Tourism, the National Tourism Organisation (established by the government) and 22 local tourism organisations (established by municipalities) govern tourism. Design interventions relating to digitalisation and user-centeredness are quite rare in Montenegro. Thus, the newly developed national marketing strategy points to strengthening customer experiences; it does not, however, link this issue strongly to processes of co-design or digitalisation.

The socio-economic context of the two countries differs largely. However, we consider these differences to be a necessary element of our research from two perspectives. By comparing the findings from both areas and by distilling the shared characteristics of the meta-design used, we are able to reveal, independently from their context, the general paradigms that shape meta-design employed by DMOs. Secondly, by considering context we are able to identify differences in the DMOs' meta-design which depend on factors such as differences in markets and in normative settings. The insights developed in this paper may, therefore, be helpful in providing an understanding of not only the meta-design of DMOs in general, but also of meta-design within various destination contexts.

4. Methodology

To obtain a comprehensive insight into our research questions, we conducted a quantitative study, which aimed to understand the degree to which DMOs take over the task of meta-designers and to what degree their meta-design is characterised by digitalisation and user-centeredness. Furthermore, we aimed to identify relevant factors that would enable DMOs to take on meta-design.

4.1. Sampling

The survey addressed all registered DMOs in Swabian Alb and in Montenegro. Contact data was compiled in a complete inventory in advance; this was done by contacting local and regional public authorities. In total, 70 DMOs were addressed; 45 from Germany and 25 from Montenegro. All of the DMOs were able to access the questionnaire in their respective languages between 6th and 28th February 2018. DMOs functioning at a higher administrative level in both countries promoted the survey to reach smaller organisations in order to increase the response rate.

4.2. Questionnaire design

The questionnaire contained a total of six variables which were structured into three sections. Each variable contained several items. These items were deduced from literature (Libert, Wind & Beck, 2014; Wind, Fung & Fung, 2009), but were adapted to meet the specific aims of the study. In the first section of the questionnaire, the variables of meta-design, user-centeredness and digitalisation were considered. The meta-design variable comprises five items; these mirror the concept of DMOs enabling visitors and tourism service providers to structure their interaction in such a way as to co-produce unique experiences. On the one hand, these items target structures (i.e. DMOs maintain networks), and refer to processes (i.e. DMOs promote knowledge sharing). The user-centeredness variable comprises four items. It takes into account the fact that DMOs may exhibit different degrees of customer orientation, ranging from 'gathering customer data' to 'orchestrating touch points'. The digitalisation variable comprises five items, which similarly cover various aspects and levels of digital expertise, see Table 1. In the second section of the questionnaire, two variables were included that could be regarded as meta-design drivers. The first was the variable 'DMOs' activities'. We assumed that activities practiced intensively by DMOs would correspond to their core competencies; mastery is usually gained in regularly practiced activities. Thus, main activities could serve as proxies for competencies. Competencies, in turn, could then influence meta-design. Four items were formulated, which ranged from the traditional, market-oriented activities of DMOs to new network-based activities. The second was the variable 'DMOs' stakeholders'. This covered interaction between DMOs and their main partners: guests and visitors, service providers, tourism associations, internet platforms and providers of subsidies or grants, see Table 2. Respondents indicated a level of intensity surrounding interaction with these partners. In the third section of the questionnaire, information on available resources and on the number of DMO employees was collected. The items in the first two sections of the questionnaire were measured by a 5 point Likert scale, which ranged from 'I fully agree' (5) to 'I do not agree at all' (1). The variables in the third section were measured on a continuous scale. In addition, DMOs' activities were recorded at a regional level, along with their home country. The study was set up as an online questionnaire. The questionnaire was programmed identically in both German and Montenegrin languages using the online-tool 'Soscisurvey' (https://www.soscisurvey.de).

4.3. Data analysis

In the first preparatory step, an exploratory factor analysis was performed to ensure that the data structure of the latent variables of meta-design, user-centeredness and digitalisation corresponded to their conceptual set-up. The Kaiser-Meyer-Olkin (KMO) measure confirmed data adequacy. Responses to the related items were factor analysed using varimax rotation. An eigen value of 1.0 was used as the threshold for factor extraction. A factor loading of at least 0.5 was accepted for item inclusion. Results of the factor analysis are reported in the results section below. In the second step, the research questions were addressed by applying a mix of the analytical steps. Research question 1 was answered by calculating the distribution of frequencies of the variable 'meta-design'. Research question 2 was answered by calculating the correlations between the variables 'meta-design', 'user-centeredness' and 'digitalisation'. Since the variables were not normally distributed, the correlation was calculated according to Spearmans Rho. Research question 3 was addressed by calculating a regression analysis. Here, the variable 'meta-design' served as the dependent, while the DMOs' main activities, the degree of interaction with main stakeholders and available resources, served as independents in the equation. Finally, the differences between the two countries were examined by performing a comparison of medians and an analysis of any significant differences by applying the non-parametric Mann-Whitney U-test. All analytic steps were performed using the statistics software SPSS25. The results are reported in the following section.

5. Results

In this section, the results of all of the analytical steps are reported, beginning with a description of the sample. In total, 58 responses were recorded: 34 came from the Swabian-Alb and 24 from Montenegro. This corresponds to a response rate of 79% in Swabian Alb. In Montenegro, on a regional basis, the response rate was as follows: Southern region 39.1%, Central region 26.1%, Northern region 34.8%. The overall response rate for Montenegro was 81% on a local basis, 19% on a national basis. This shows that the answers from the DMOs were spread equally over the Montenegrin DMO network. German DMOs on average, have 6.4 employees; Montenegrin DMOs are generally larger and, on average, have 16.46 employees. In Germany, mostly local level DMOs participated in the survey (50%), but almost the same number of institutions were present at a regional level (35%). In Montenegro, exclusively Local Tourism Organizations (LTOs) and the National Tourist Office (NTO) participated as regional institutions do not exist. Nearly all German DMOs are organised communally by municipalities; about 15% of DMOs in Germany are registered associations. In Montenegro, all DMOs surveyed are public institutions: the NTO is financed and organised by the Government of Montenegro, while LTOs fall within municipal structures. The results of the data analysis are reported below.

5.1. Results of preparatory factor analysis

As explained in the methodology section, an explanatory factor analysis was undertaken to confirm the structure of latent variables present in meta-design, user-centeredness and digitalisation. Accordingly, responses to the items contained in section one of the questionnaire were analysed on a factor basis. Table 1 displays the descriptive statistics (means and standard deviation) as well as the attribution of items to variables. Three variables were extracted by the factor analysis: The variable 'meta-design' comprised five items, the variable 'user-centeredness' four items and the variable 'digitalisation' five items. The explained variance was 67.14%. To determine the internal consistency of the scales, Cronbach's alpha was calculated for all three variables: for the variable 'meta-design' it was 0.872; for the variable 'user-centeredness' it was 0.806 and for the variable 'digitalisation' it was 0.811. Deleting items from all three variables did not increase Cronbach's Alpha. Therefore, based on these results, the items were integrated into a mean summary score. Table 1, below, contains the results calculated.

Table 1
Factor analysis on latent variables

	Mean	S.D.	Component		
			Meta -design	Digitali- sation	User -centredness
• We foster networks between service providers	3.055	1.239	0.796		
• We follow strategies to enhance cross-company processes of innovation	2.250	1.135	0.699		
• We motivate service providers to constantly develop new products and services	3.500	1.176	0.764		
• We set up processes of learning and knowledge sharing between service providers	3.255	1.220	0.871		
• We keep services providers updated on trends	3.333	1.123	0.744		
• The creation of a digital tourism infrastructure is our priority goal	3.396	1.261		0.709	
• Information important for the guest's experience is available digitally	3.000	1.112		0.605	
• We maintain technical systems to interact with service providers	2.000	0.842		0.693	

Table 1 **Continued**

	Mean	S.D.	Component		
			Meta -design	Digitali- sation	User -centredness
• Our brand is customer driven and enacted by social media	2.462	1.128		0.722	
• Service innovation based on digital technology accounts for the largest part of innovation	2.679	1.173		0.662	
• Guests can package service elements online according to their needs	2.431	1.204			0.782
• Our guests can book services online	2.556	1.449			0.809
• We regularly gather and evaluate data on customers	3.278	1.188			0.506
• We share data on customers with service suppliers	2.873	1.248			0.634
• Variance explained (%)			26.900	21.400	18.800
• Cronbachs alpha			0.872	0.811	0.806

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalisation.
Rotation converged in 14 iterations.

5.2. Results addressing research question 1

The first research question refers to the extent to which DMOs take on meta-design tasks. The answer to this question was obtained by analysing the frequency distribution of the variable 'meta-design'. The results indicated that 36.8% of the answers fell in the region between 3.6 and 5.0 – with 5.0 indicating the highest degree of agreement. Thus, a minority of respondents agreed, or fully agreed, that they were performing meta-design tasks. A majority of 63.2% of DMOs diverged from this view: they disagreed with the statement that they were taking on meta-design tasks. Thus, according to our data, DMOs perform meta-design to a relatively small degree.

5.3. Results addressing research question 2

The second research question examines the extent to which meta-design performed by DMOs is characterised by user-centeredness and digitalisation. To answer this question, a correlation was calculated according to Spearman Rho. The results indicated that both variables significantly interrelated with meta-design. The correlation coefficients were 0.546 (user-centeredness) and 0.563 (digitalisation), see Table 2, penultimate line. Both variables interrelated with meta-design to approximately the same extent. However, the relation between the variables and meta-design was not very strong. Furthermore, both variables correlated with each other (0.678). We therefore deduced that the meta-design practiced by DMOs is characterised by user-centeredness and digitalisation, albeit to a moderate extent.

Table 2.
Descriptive and bivariate statistics

	Mean	S.D.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1. Our main activity is the marketing of tourism products	4.070	1.197	1.000														
2. Our main activity is networking	3.420	0.989	0.280*	1.000													
3. Our main activity is knowledge-sharing	2.910	1.024	0.220	0.465**	1.000												

Table 2 **Continued**

	Mean	S.D.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
4. Our main activity is product development	3.480	1.328	0.544**	0.498**	0.312*	1.000											
5. Visitors and guests	4.280	0.921	0.632**	0.201	0.196	0.390**	1.000										
6. Tourism service providers	3.490	1.103	0.380**	0.540**	0.334*	0.463**	0.455**	1.000									
7. Tourism associations	4.110	1.039	0.432**	0.312*	0.549**	0.498**	0.320*	0.416**	1.000								
8. Internet platforms	3.610	1.192	0.580**	0.278*	0.330*	0.442**	0.504**	0.463**	0.596**	1.000							
9. Providers of subsidies and grants	3.450	1.214	0.464**	0.292*	0.297*	0.477**	0.392**	0.481**	0.732**	0.698**	1.000						
10. Number of employees	10.570	12.210	0.207	-0.022	0.001	0.114	0.043	0.024	-0.038	0.196	0.195	1.000					
11. Resources dedicated to networking	18.270	16.193	0.594**	0.312	0.144	0.368*	0.312	0.265	0.323	0.282	0.405*	0.494**	1.000				
12. Regional level of activity	1.550	0.765	-0.063	0.110	0.052	0.067	-0.106	0.081	0.051	0.051	0.184	0.065	-0.159	1.000			
13. Digitalisation	2.750	0.866	0.552**	0.370**	0.294*	0.510**	0.361**	0.407**	0.434**	0.477**	0.450**	0.321*	0.649**	-0.015	1.000		
14. User-centredness	2.840	1.062	0.472**	0.306*	0.287*	0.324*	0.117	0.288*	0.391**	0.416**	0.355**	0.304*	0.528**	-0.117	0.678**	1.000	
15. Meta-design	3.130	0.998	0.293*	0.496**	0.405**	0.465**	0.239	0.387**	0.394**	0.422**	0.498**	0.104	0.289	0.248	0.563**	0.546**	1.000

* Significant at $p < 0.05$, ** Significant at $p < 0.01$.

5.4. Results addressing research question 3

The third research question addresses the drivers of meta-design. The following elements of the questionnaire were considered: DMOs' main activities, DMOs' interaction with stakeholders, DMOs' resources for networking, the number of employees and DMOs' regional settings. To determine to what extent these variables affected meta-design, a regression analysis was performed using the items from these variables as independents. Table 2 displays the descriptive statistics (means and standard deviation) as well as the correlations between all variables included in the analysis. All correlations are well below the value of 0.8, thus reflecting different constructs. Both the VIF value for multicollinearity (< 5.4) and the Durbin-Watson value (2.009) met the criteria. Furthermore, data did not exhibit heteroscedasticity. The results showed that the proportion of variance of the dependent variable (meta-design) which is explained by the independent variables, was acceptable. Adjusted R^2 was 0.597. The F-value was 4.457, p=0.003.

Looking at the regression coefficients, it can be stated that the item 'regional level of activity' significantly influenced the meta-design performed by DMOs (0.572, p=0.003). This shows that superordinate DMOs are taking on meta-design tasks more frequently. Additionally, 'suppliers and service providers' were shown to provide DMOs with support to take on meta-design tasks (0.480, p=0.047). Thus, DMOs that are strongly in contact with tourism suppliers and service providers are more likely to be able to perform such tasks. The same applies to the item 'estimated percentage of resources' dedicated to networking (0.479, p=0.032). DMOs that have sufficient resources for networking can practice meta-design more intensively. However, employees play an unclear role. The item 'number of employees' should have a significant impact on the potential to practice meta-design; however, this impact is negative (-0,307, p=0.039). This shows that DMOs that have numerous employees are not necessarily able to practice more meta-design. The third research question was answered as follows: the regional level DMOs are active on, their contacts to tourism service providers and their resources for networking drive them to take over meta-design tasks.

5.5. Evaluation of country specific differences

Finally, the differences in meta-design between DMOs in Montenegro and Germany were analysed. To investigate these differences, a comparison of medians was performed using the Mann-Whitney U test. The comparison targeted the three variables 'meta-design', 'user-centeredness' and 'digitalisation'. Based on these three variables, two groups were formed on a country basis. Differences between the medians within these two groups were calculated and tested for significance. It turned out that DMOs in Germany and Montenegro exhibited significant differences in terms of user-centeredness and digitalisation. The medians for both variables were higher in Montenegro than in Germany. The differences were highly significant ($p = 0.013$ for digitalisation and $p = 0.001$ for user-centeredness). However, the differences between German and Montenegrin DMOs relating to the variable 'meta-design' were not significant. According to our data, context therefore played a significant role in terms of the extent to which DMOs practice digitalisation and user-centeredness.

6. Discussion and implications

DMOs are confronted with a high degree of complexity because they need to coordinate experience production systems, which are characterised by the social interaction of service providers and guests as well as human-technological interaction arising from the adoption of digitalisation processes in customer value chains. To solve this complexity, DMOs can take on meta-design to frame the way that customer journeys emerge in destinations. This means that they provide structures and processes to shape the way that experiences are generated. In this paper, the type of meta-design practiced in the field of destination management was understood to be characterised by two main factors, user-centeredness and digital technology; both of these factors are important social and technical features of the experience production system. In our empirical study, we investigated to what extent DMOs already perform meta-design and what factors drive them to take on meta-design. We would now like to discuss some of these findings against the backdrop of what has been developed in theory.

6.1. Discussion of results

First, the results for research question 1 showed that only a small number of DMOs could be classed as living up to the role of meta-designer. These were predominantly superordinate DMOs, that is those working at national or supraregional levels. This situation can be explained through reference to literature. It has been stated that destinations are not geographical units, but are virtual spaces that emerge from guests' activities. Guests activate certain service providers and put together individual customer journeys which, in turn, determine the 'experience space' that guests consider to be destinations. Supraregional level DMOs could, most probably, cover such customer journeys more easily than local or regional DMOs. This is not to say that regional or local level DMOs could not take on significant aspects of meta-design. However, since destinations activated by guests might cover more than one town or region, they need to shift their focus away from political or administrative units to relevant geographical spaces that contain the guests' experience production systems.

Second, the results for research question 2 showed the importance of both digitalisation and user-centeredness as technical and social features of meta-design. Both elements correlated with meta-design. However the correlation was weak. As is seen in literature, digitalisation and user-centeredness are not perceived as 'all or nothing' games. They both include several levels of implementation. In terms of digitalisation, this ranges from digital information systems to virtual reality in experience production. In user-centeredness, this ranges from informing customers to including customers in production

processes. Considering these different levels, it might be likely that DMOs already have started to use digitalisation and user-centeredness. The use of such elements only has not yet generated a profound effect on the introduction of meta-design. Furthermore, data shows that user-centeredness and digitalisation interrelate with each other. Making progress in digitalisation implies progress made in user-centeredness and vice-versa. Both elements need support from each other to attain a higher level. Management therefore needs to work on both simultaneously and in parallel; this evidently adds a degree of complexity to the situation and could also support the concept that DMOs find themselves confronted with 'wicked problems' when attempting to structure experience production systems.

Third, the results for research question 3 identified some ways of enabling and encouraging meta-design. Such methods include close interaction with tourism service providers, the dedication of significant resources to networking and the creation of supraregional settings to enhance the operations of DMOs. The significance of a superregional setting has already been discussed in the first section of this chapter. The other results should be set in the following theoretical context. As seen in literature, guests co-produce their holiday experiences by activating local service providers. These service providers may be local tourism enterprises, but can also be members of the local population or local public institutions. All of them make an important contribution to co-producing experiences and are thus a part of the experience production system. DMOs that are in close contact with these contributors are in a better position to structure their interaction with guests. Furthermore, processes of change, such as the shift from meta-management to meta-design currently faced by DMOs need resources. As seen in literature, design processes are value-laden and require both iterative consultation and political negotiation. They therefore consume time and financial resources. DMOs with adequate resources should therefore be in a better position to take on design processes.

Finally, our empirical findings showed differences between both countries in the areas of digitalisation and user-centeredness. On average, Montenegrin DMOs employed digitalisation and user-centeredness more intensively than did German DMOs. From literature, we learned that DMOs depend on legislative and political settings when carrying out their work. Context, therefore, is of great importance in terms of understanding the way how meta-design is perceived and realised in a specific country. It may be that Montenegrin DMOs are able to execute meta-design and related components more quickly and more efficiently than German DMOs due to the fact that they are situated in a relatively small and dynamically growing tourism market. However, it may also just be that DMOs in both countries have a different understanding of digitalisation or that their perception of the importance of digitalisation and/or user-centeredness is different.

6.2. Practical implications

In light of these findings, we would like to put forward some practical implications. First of all, destination meta-design is a new concept. Design implies a pragmatic approach, one which aims to introduce path-changing solutions, rather than applying standard managerial solutions. If DMOs wish to implement meta-design in their destination more successfully, they first need to understand the differences between 'wicked' and 'managerial' problems. We believe that issues surrounding 'wicked problems' should be actively introduced into professional debates on destination management, as well as being included in professional curricula, to help to raise awareness.

Secondly, we believe that the strengths of design science should be presented more clearly. Indeed, our empirical survey showed that only a small fraction of DMOs came close to what we understand as meta-designers. Thus, not only the concept of 'wicked problems', but also the approach required to solve them could benefit from being promoted. We think that experimental, real-world settings (i.e.

real world laboratories) could serve to achieve this aim. Within such settings, DMOs could experiment freely with design interventions that target user-centred, digital meta-structures in their destinations. These design interventions could be inspired by experiences in other fields of society (i.e. city design). The effect of design interventions could be closely monitored and could serve as input for learning cycles.

Meta-design can be practiced in many types of DMOs. However, our study found that mainly superordinate DMOs chose to take on meta-design. It could, therefore, be argued that meta-design should not be taken on by all DMOs – but that it would be more effectively carried out within a system of 'job sharing' –by those DMOs that are able to cover multiple, flexible and user-centred customer journeys. Looking at our results, it is evident that most DMOs are attached to administrative, geographical units. Many of these are public organisations, financed by cities or counties. We would like to contend that this present administrative framework of DMOs might not be able to effectively address current market conditions by taking on meta-design. New approaches for financing and/or organising DMOs, i.e. as public private partnerships could perhaps be one solution for the way forward.

6.3. Limitations and research implications

This brings us to the limitations of our study. Primarily, the sample of our survey is rather small. The statistical power of our results is limited. For example, we could not identify any single activity or core competency that influenced the willingness of DMOs to taking on meta-design. This was an unexpected result and may stem from the limitation in available data. On the other hand, however, the selection of items in the field of activities could have been too narrow. A replication of this study with a larger sample and with additional core competencies of DMOs, preferably in the field of transition management, could perhaps shed light on this issue. Secondly, we argued that context plays an important role in meta-design for DMOs. We see a promising field of future research here which would touch upon questions such as: How should normative settings be shaped to encourage DMOs to take on meta-design? Which features of normative settings, such as values (i.e. risk propensity), could help to enable DMOs to take on meta-design? Furthermore, it was evident that DMOs' contacts with tourism service suppliers had a positive impact on their ability and/or willingness to take on meta-design. In this regard, our work may help to inform further research studies that wish to look into these contacts in more depth. Possible questions could be: of what quality do contacts to service suppliers need to be to promote meta-design? Which service providers are most important, what kind of contacts are most important?

7. Conclusion

DMOs performing as meta-designers, in this paper, are perceived as organisations that set-up and maintain structures and processes that shape the communication and interaction of all those factors and actors that collectively influence the creation of an experience within an experience production system. We collected data to see how far DMOs take on the tasks of meta-designers and to what degree the meta-design they perform is characterised by digitalisation and user-centeredness. We found that only a small fraction of DMOs in Germany and Montenegro perform meta-design. Those who came closest to this role were operating at a superordinate level. Consequently, we argue that meta-designing may not be a task that should be executed by all DMOs at all administrative levels, but that it could be attributed to those DMOs that relate most comprehensively to entire customer-journeys relating to specific segments of guests. According to our data, although digitalisation and user-centeredness characterise meta-design, they only do this to a small extent. Although the DMOs in our sample appear

to have embarked on realising both aspects of meta-design, they have chosen to do this at an rather operative level. They do not employ these elements as an overall framework to structure the interaction between destinations and guests. Finally, we identified interaction with tourism service providers and suppliers as an enabling factor for introducing user-centred, digital meta-design. We argued that service providers are important co-producers in an experience production system. DMOs that stay in close contact with them are able to easily structure their interaction with guests. However, we also saw that meta-design is dependent on available resources and context. Our review of literature along with our empirical study has also resulted in the identification of future fields of research.

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