

Turizm Akademik Dergisi

🗱 TOURAJ

TURIZM

AKADEMİK DERGİSİ

Tourism Academic Journal

www.turizmakademik.com

A Case Study Based Mix-Method Research Design for Practicing Resource Orchestration in Tourism Destinations

Emre ERBAŞ^a*

^a Burdur Mehmet Akif Ersoy University, School of Tourism and Hospitality Management, BURDUR, ORCID: 0000-0003-3595-8676

Abstract

The ability of the modular design of tourism attractions is crucial to attracting tourists for certain destinations. Establishing connections between these attractions in a way to create multiplicative effects can be a great value for the competitiveness and sustainability of destinations. Still, appropriate techniques and managerial approaches for analyzing and practicing such an approach are ignored in the extant research. This study develops a case study-based mixed-method research design based on the analytical hierarchy process and interpretive structural modeling techniques as a tool for resource orchestration theory to better understand and practice destination product portfolio development. The practice of the proposed approach is illustrated in a city tourism destination. The product options regarded here include the orchestration of different types of tourism bundled of different attractions within the case destination. A mapping of interconnections between the types of tourism is presented based on the degree of their relative explanatory power and hierarchical levels. The proposed method is appropriate not only for tourism destinations but also for other areas of management or marketing of a product or service. Discussions and suggestions based on the proposed approach are also included.

Keywords: Mixed-method; qualitizing; case study; resource orchestration; management; tourism destination.

JEL CODE: Z32, C18, L52

Article History:

Received	: 23 September 2019
Revised	: 14 October 2019
Accepted	: 05 November 2019
Article Type	: Research Article

Erbaș, E. (2019). A Case Study Based Mix-Method Research Design for Practicing Resource Orchestration in Tourism Destinations, Turizm Akademik Dergisi, 6 (2), 239-253.

^{*} Corresponding author e-mail address: emreerbas85@hotmail.com

INTRODUCTION

In today's experience economy, destination policymakers design multimodal transport alternatives to increase the accessibility of destinations and establish operative connections between inter-regional and local modes of transportations through digitalization to offer a rich tourist experience (OECD Tourism Trends and Policies, 2016, p. 18). Understanding the interplay between tourism destinations is crucial to make such an offer (Benur & Bramwell, 2015; Briedenhann & Wickens, 2004). Suppliers look for innovative ways to satisfy consumers by emphasizing modularity in the design of products and thus meaningful consumer experience in their offerings (Binkhorst & Dekker, 2009). The modularity or complementarities refer to the elements or relationships which increase the value of the joint production of tourism services and products (Wiedenfield, Butler, & Williams, 2011: 595). In this manner, to be able to orchestrate the bundling of tourism attractions to supply a plentiful destination experience may provide a basement for better destination marketing and management activities. Hence, this study exemplifies how different types of tourism in destinations can be orchestrated through a managerial capability of resource orchestration. However, destination product development implications are frequently implemented inmethodically based on dispersed market-based decisions rather than integrated destination-level policies (Benur & Bramwell, 2015). The critical factors such as building and sustaining collaborative relationships, the motive for collaboration, factors facilitating or inhibiting collaboration, and the outcomes resulted from such collaborative activities are generally ignored (Naipaul, Wang, & Okumuş, 2009). The theory of research orchestration may help us to understand and build destination-level policies regarding product development practices in tourism destinations. According to the theory, decision-makers must develop capabilities at structuring, integrating, and leveraging their organizational resources toward emergent opportunities (Wales, Patel, Parida & Kreiser, 2013). For example, the confusion and challenges in destination product diversification, such as a product diversity strategy, and alternatively concentration on purely one or a few product strategies (Benur & Bramwell, 2015) remains unsolved. The lack of managerial views on the topic makes it even harder to understand how such concepts can be put into practice successfully. Hence, rather than bundling products within only marketing orientation, orchestrating them diligently in a way to increase their multiplicative power matters more in today's knowledge economy (Powell, 2017).

Although recent destination product development research concentrate on destination cooperation in terms of marketing, (Naipaul, Wang, & Okumus, 2009), clustering or concentration of destination products (Wiedenfeld, Butler, Williams, 2011; Benur and Bramwell, 2015; George, Henthorne, & Williams, 2016); there is also a growing interest to the topic from the perspective of managerial capabilities such as knowledge management (Jovicic, 2019), governance (Damayanti, Scott, & Ruhanen, 2019), coopetition (Saraniami & Komppula, 2019), entrepreneurship and networking ability (Ferri & Aiello, 2017) and, strategic planning through social capital (Soulard, Knollenberg, Boley, Perdue, and McGehee, 2018). Yet, though these research concepts (e.g., smart destination) help us to understand the topic, they fall short developing techniques that work well for designing and practicing managerial abilities for destination product development. Additionaly, the research is away from providing a holistic understanding regarding how the destination decision makers can provide an umbrella under which different types of tourism can be interlinkaged (Damayanti, Scott, & Ruhanen, 2019).

The current study thereby extends the available research in several ways; i) we add to the destination development literature by building a technique on how resource orchestration across a portfolio of different types of tourism may be designed to create complementary and synergetic interlinkages between them, ii) by doing this, we develop a new approach supporting resource orchestration as a managerial capability development for destination portfolio development as a response to the grand call of Sirmon et al. (2011); and, iii) the proposed research design enables us to understand how different types of tourism in a single tourism destination can be orchestrated hierarchically and structurally with the advantage of case study based mixed-method research design. Our study extends resources orchestration theory empirically; specifically, it is the first effort to saliently apply the theory to a tourism destination context.

In this manner, the main purpose of this paper is to introduce a resource orchestration technique based on interpretive structural modeling (ISM) and the analytical hierarchy process (AHP) within a case study based mixed-method research design. As known mixedmethod research design provides us the flexibility to take advantage of different research methodologies in a combined manner. The proposed technique can be used for the orchestration of different types of tourism to reveal and design their multiplicative power for the destinations under analysis.

LITERATURE REVIEW AND THEORETICAL BACKGROUND

Today's knowledge economy encourages firms to practice resource orchestration practices to be able to simultaneously exploiting and exploring resources in a dynamic business environmentResource orchestration theory underscores that it is the role of managerial actions in combining resources and capabilities that results in better performance and strategy outcomes (Helfat, 2007; Sirmon et al., 2007, 2011). Here, decision-makers optimize firm performance by configuring the firm's resources, bundling resources, and leveraging those resources to achieve strategic objectives in the business environment (Sirmon et al., 2007; 2011). In other word, resource orchestration is a managerial capability involving activities concerned with the exploitation and exploration of resources throughout the firm strategically (Helfat, 2007; Sirmon et al., 2007; 2011). The managerial activities in resource orchestration involve the processes of structuring (formation of the firm's resource portfolio by acquiring, accumulating, and divesting resources), bundling (using resources to build capabilities, including stabilizing, enriching and pioneering) and leveraging (catching the opportunities in the marketplace by a sequence of activities; mobilizing, coordinating and deploying resources). When resources have been successfully structured and bundled, they must be effectively leveraged (mobilized, coordinated, and deployed) to exploit market opportunities and for creating and maintaining value for customers (Sirmon et al., 2007).

As firms are occupied with resource orchestration, they are engaged with making continuous tradeoffs between the exploration of opportunities and the exploitation of existent business actions, which accompanies challenges in disseminating limited resources across activities (Baert, 2016). From the perspective of managerial capabilities, exploitation and exploration in a synchronous manner is related to balancing trade-offs such as flexibility versus efficiency (Kortmann, Gelhard, & Zimmerman, 2014). More clearly, managers pave the way for firm performance by designing the company's resource portfolio, bundling resources, and leveraging those resources during the competition (Sirmon, Hitt, Ireland, and Gilbert, 2011). In another word, resource orchestration includes systematic and operative management of the firm's resource portfolio alongside possible resource divesting (Carnes et al., 2016). Here, the processes in leveraging are critical to achieving effective results from the performance outcomes (Hitt, Ireland, Sirmon, & Trahms, 2011). The most important part of leveraging is mobilizing and coordinating (Chricio, Sirmon, Sciascia, & Mazolla, 2011). During mobilizing, firms typically identify prizing and genuine operational and product bundling to gain competitive advantage through experimental resource allocation patterns (Baert, Meuleman, Debruyne, & Wright, 2016: 3). Developing processes to help leveraging capabilities depends on the successful orchestration of resources (Wales, Patel, Parida, & Kreiser, 2013). Helfat, Finkelstein, Mitchell, Peteraf, Singh, Teece, and Winter (2007) emphasize the development of a 'vision' or a map to dynamize resources is vital for successful leveraging. This is explained by mobilizing and coordinating (Sirmon et. al, 2011). Mobilizing is the formation of a blueprint or vision for capabilities needed to form necessary capability configurations (Sirmon et al., 2007). Following mobilizing, coordinating the mobilized resources is needed to sustain their complementary integration (Sirmon et al., 2011). The coordination complements mobilizing to sustain co-specialized assets in value-creating coalignment (Helfat et al., 2007).

Without leveraging, relying on only the static possession of resources, an organization has a patchy understanding of exploiting and exploring (i.e., organizational ambidexterity) resources within the dynamic business environment (Baert, Mueleman, Debruyne, & Wright, 2016). The same case is relevant to tourism destinations. For example, smaller destinations and communities constituting a restricted number of tourism resources and stakeholders in a certain geographical location, products lean to be disintegrated and scattered around a certain geographical area (Naipaul, Wang, & Okumus, 2009: 463). However, consumers intend to exploit their travel benefits by experiencing different destinations simultaneously throughout a region instead of limiting themselves to one part of a region/destination (Hwang & Fesenmaier, 2003). On the other hand, the decisive orientation on diversification, intensification, and linkage of destination products through wellintegrated key attractors, services, and experiences will strengthen competitiveness and sustainability of destinations (Crouch & Ritchie, 2000; Benur & Bramwell, 2015). In this context, leveraging is vital for the destinations to take advantage of economies of scope rather than economies of scale (Greffe, 1993). Coordinating destination attractions rise synergies among destination appeals motivating tourists visiting multiple attractions and extend the length of stay (Benur & Bramwell, 2015; Wiedenfeld et al., 2011). For instance, Weidenfeld, Butler, and Williams (2011) found that spatial clusters of identical products or nonidentical products in the destination can aid in interconnecting "a narrative structure that will lead visitors through thematically interrelated subattractions and create business opportunities and

extend the length of stay" (p. 600). Another important finding indicates that while each of the attractions in Scotland sustained their distinctiveness and signature, their mutual complementarities and cooperations are proven to form a collective competitive advantage as a destination (Fyall, Leask & Garrod, 2001). Although it is always possible for an attraction to retain control of its core product in any collaborative initiative, attractions can differentiate or diversify core products, thereby creating augmented products at various points like seasons (Fyall et al., 2001). Similarly, by regional cooperation, a destination can provide coordinated products or create economies of scale by offering the same benefits for the common target market (Fyall and Garrod, 2004). Wiedenfeld et al. (2011), exemplified that tourist attractions have established successful tourism clusters through well-designed cooperative-complementary relationships in their case attractions from the Cornwall region of the UK. Hill and Shaw's (1995) study has emphasized that, as long as the destinations are in close proximity to each other, coordination of destinations is more likely to be possible. Ferri and Aiello (2017) have illustrated that sustainable tourism is possible if all key stakeholders can create networking. Naipaul, Wang, and Okumus (2009) indicated that destinations gain a competitive advantage when they successfully integrate tourism product portfolio through cooperative branding, image building, and resource pooling. Destinations should, therefore, be aware of the independent attractions and that the individual positions are properly mobilized and coordinated to increase the multiplicative power of attractions (Wang and Fesenmaier, 2007). Therefore there is a substantial need for managerial implications and techniques that support managers to practice the implications diligently to create a competitive tourism portfolio (Kong and Chang, 2012).

Under the light of this information, resource orchestration can be useful tourism for destination portfolio development if destinations leverage attractions or resources diligently. Porter (1998) claimed that, here, the requirement for success is distinctiveness; that the character of the cluster or portfolio is determined by the available local resources. Moreover, in a wider context, contextual factors such as the firm's life-cycle stage differ the impact of each bundling action (Carnes et al., 2016). Hence, the key question is how destinations manage diversification more efficiently and effectively when coordinating or combining attractions within the boundary conditions (Benur & Bramwell, 2015; Sirmon et al., 2007; Wales, Patel, Parida, & Kreiser, 2013). Relying on contingency theory, decision-makers' managerial ability of absorption of destination environment affects the way destination resource orchestration when destination exploration or exploitation (Carnes et al., 2016; Ciu & Pan, 2015; Sirmon et al., 2011). As a bridge between uncertain environment and managerial capabilities, resource orchestration plays a vital role (Ciu and Pan, 2015). Through leveraging, providing a blueprint, tourism destinations will mainly be able to i) design the concentration of attractions, ii) plan cooperative and complementary interlinkages among attractions, iii) cooperate with other destinations by pooling their resources and, iv) enhance destination experience of visitors. In this context, resource orchestration can be defined as an important managerial capability for destination portfolio development.

Besides there is no research on resource orchestration in travel and tourism research, the extant limited number of studies have used the theory as a theoretical lens for their research models in which the entrepreneurship is in the center (Baert, Meuleman, Debruyne, & Wright, 2016; Carnes, Chricio, Hitt, Huh, & Pisano, 2016; Chricio, Sirmon, Sciascia, & Mazzola, 2011; Cui & Pan, 2015; Wales, Patel, Parida, & Kreiser, 2013; Wright, Clarysse, & Mosey, 2012).

On the other hand, orchestrating resources preciously is not a hassle-free process at all times, particularly when activities and routines are deeprooted, and adopted within the organizational structure (Carnes, Chirico, Hitt, Huh, & Pisano, 2016). For this reason, resource orchestration needs to be supported by systematic approaches or techniques. However, how to refine the leveraging of resources to create a viable resource orchestration is still a challenging issue (Wright, Clarysse, & Mosey, 2012). Hence, to overcome this challenge, in this study, we focus on leveraging by developing a tool for it. To ground the contingency into the resource orchestration, case study approach is adopted through a mixed-method research design to reflect the boundary conditions in the destination under the study.

RESEARCH METHODOLOGY

The Case Study of Destination of Burdur

Burdur, a small city destination in Turkey known as the capital of lakes, has an abundant historical heritage from the settlement of many civilizations from the Early Bronze Age to the Ottoman Empire. It is a superb location for water, winter and air sports (e.g. Lake of Salda and Salda Ski center), cave tourism (e.g., İnsuyu), historical heritage tourism (i.e., Sagallassos), hunting tourism (e.g., black grouse), rural tourism (e.g. levander streams) and their derivatives.

The expert interviews

The questionnaire-based interviews were organized in Burdur in Turkey. During the interview, five experts (a lecturer in archeology, two lecturers in gastronomy, a lecturer in rural tourism, and a lecturer in strategic destination planning) were interviewed.

AHP, ISM and the Case Study Approach within the Mixed-Method Research Design

The analytic hierarchy process (AHP) is a theory of measurement through pairwise comparisons. It depends on the judgments of experts to draw priority scales as shown in Table 1. The comparisons are originated applying a scale of absolute judgments that describes how much more one element dominates another with respect to a given attribute (Saaty, 2008). AHP consistently includes three basic phases (Saaty, 1980) 1) structuring of the hierarchy; 2) describing and conducting data acquisition (i.e., comparative judgements) to produce pairwise comparative data on components of the hierarchical schema; and 3) synthesizing the priorities. In this context, pairwise comparfdison of the seven types of tourism in Burdur is presented in Table 3. The AHP results are further qualitized within the building of ISM through a mixedmethod research design. ISM is defined as interpretive method based on group consensus on whether and how attributes are interconnected relying on a structural mapping (Watson, 1978). It helps to streamline and direct the labyrinthic linkages among elements of a system. To draw final conclusions in understanding such a system, we used ISM to illustrate how different types of tourism can be orchestrated. ISM is executed based on the following steps (Warfield, 1974):

- Listing of the elements related to problem (investigating structural relationship between the elements (i.e., major types of tourism) in Burdur to create a value-laden tourism destination)
- Establishment of contextual relationship among the elements (pairwise comparison of major types of tourism based on AHP is conducted and the results are used for the following steps)
- Structural self-interaction matrix (SSIM) is obtained by pair wise comparison to check the transitivity
- Reachability matrix (RM) is developed using SSIM and further partitioned into different levels.
- Reachability matrix is used to develop a conical matrix. Rearrangements of the variables are done with respect to the levels identified.

- A directed graph (digraph) is developed and transitivity links are removed.
- The digraph is transformed into an ISM model by replacing the nodes of the elements with statements.

AHP and ISM are embedded during data collection. To develop case-specific MMR design, we built ISM based on AHP results through data transformation (i.e., qualitizing). Hence, the two methods complemented each other. Notably, quantitizing and qualitizing in mixed-methods are more compatible with each other for complementarity when compared with triangulation (Nzabonimpa, 2018).

Rationale and Process of MMR Design

A common justification for conducting MMR adopted in this study is that the progress or simplification in one method is enhanced due to the presence of the other. For instance, one method leads the sampling, data collection, or analysis of the other (Green, Duan, Gibbons, Hoagwood, Palinkas, & Wisdom, 2015; Sandelowski, 2000; Wisdom & Creswell, 2013). The five common rationales for utilizing mixed-method are triangulation, complementarity, development, initiation, and expansion (Greene, Caracelli, & Graham, 1989). Since qualitizing and quantitizing in mixedmethods are more suitable for complementarity than for triangulation (Nzabonimpa, 2018), we relied on the advantage of the complementarity of MMR. Thanks to complementarity, the understandability, relevance, and validity of constructs resulted in inherent method strengths and prevented inborn biases in methods and other resources (Greene et al., 1989). This is different from triangulation in that the rationale of convergence requires that the various methods evaluate a similar conceptual phenomenon. The consecutive use of qualitative and quantitative methods, where the first method is utilized to help inform the development of the second, is the most frequently used MMR approach (Greene et al., 1989). Even in triangulation-intensive MMR studies, methods are mixed to accomplish complementarity rather than confirmation (Baseley & Kemp, 2012). For example, qualitatively driven mixedmethod research designs help diagnose variables for testing within quantitative research frameworks, contribute to adjusting existing tools or to creating new tools or measures, and provide context and sense to numerical values in a self-report measure (Archibald, Radil, Zhang, & Hanson, 2015: 7). The current study used the quantitatively driven mixed-method design (QUAN emphasized) (Creswell & Clark, 2007).

	AHP		ISM
Intensity of		Intensity of	
	Definition		Redefinition for ISM
importance		dependence	
	Equal importance		No relationship among the enablers
1		1	
	Weak importance of one		The judgment is to enable one activity over
3		3	
	over another		another, but it is <i>not conclusive</i>
	Essential or strong		The judgment as to the enabling power of one
5		5	
C	importance	C	activity over another
	•		Conclusive judgment as to the enabling power
7	Demonstrated importance	7	
,	Demonstrated importance	,	of one activity over another
			The judgment in favour of one activity over
9	Absolute importance	9	another is of the highest possible order of
			enabling
	Intermediate values		
2, 4, 6, 8	between the two adjacent	2, 4, 6, 8	When compromise is needed
	judgments		

Table 1. Identification AHP Scale for ISM

Source: Adapted from Saaty (1980).

Within this context, similar data collection structure (i.e, pairwise comparison) makes it possible for both methods to complement each other. That is, each expert's responses can be converted into a final consensus matrix through AHP. ISM furthers the AHP results with the construction of structural relationships among the elements. While experts are forced to have a consensus to produce a single pairwise comparison in ISM, AHP allows getting each expert's opinion separately and to produce a single group comparison matrix through geometric means, securing each expert's view. To provide complementarity with ISM, the AHP scale is designed as explanatory as explained in Table 1. Explanatory design in mixed-methods is congruent with research in which the researcher needs qualitative data to unclose nonsignificant (or significant) results or surprising results (Morse, 1991). Hence, during the AHP calculation, an inconsistency ratio is not sought. Rather, the consistency is done through transitivity in ISM. Moreover, there is a critical argument that qualitative approaches usually sacrifice reliability (in terms of consistency of measurement) in favour of validity (in the context of utilizing concepts as the persons studied practice them in their daily routines) (Jorgensen, 1989). In this sense, the complementarity of both approaches gives us the rationale of MMR behind the current study. Moreover, the case study supports our MMR design. Since the methods are determined in relation to the nature of the case and the research questions, the case study approach is a bridge that links the research paradigms (Luck, Jackson, & Usher, 2006). Therefore, through explanatory design, the characteristics of the case study are not sacrificed to statistical necessity.

This study is a mixed-method research design combining qualitative (ISM) and quantitative (AHP) techniques based on a single data set within a case study approach. In this context, the current research contributes to the literature in two ways: i) qualitizing through the use of one type of data set and ii) executing MMR within a case study approach.

Qualitizing

In this study, the mixing is based on a quantitative data set; qualitative data rests upon quantitative results (Creswell, Clark, Gutmann & Hanson, 2003). Mixing is done via the transformation of quantitative data into qualitative data, a process called qualitizing (Heyvaert, Hannes, & Onghena, 2016). Qualitizing is identified as one way to accomplish data transformation in mixed method research (Sandelowski, 2000; Teddlie & Tashakkori, 2009; Warfa, 2016).



Figure 1. Explanatory Design: Follow-up Explanations Model based on Qualitizing. Source: Adapted from Creswell and Clark, 2007: 73.

design transformation, researchers During processes for data conversion and decide how the data will be converted (Creswell & Clarke, 2007: 65). In other words, data transformation generates its own set of lively debate and controversy (Creamer, 2018). For qualitizing in this study, averaging is used to dichotomize the quantitative findings (i.e., AHP data) as relevant to qualitative analysis (i.e., ISM) as mentioned in the literature (Tashakkori & Teddlie, 1998; Nzabonimpa, 2018) and presented in Table 2. In other words, ratio data gained through AHP is dichotomized into categorical data for the transformation process. To do this, the geometric mean of the AHP scale is calculated based on the number of participants to be able to categorize the AHP scale measures into the ordered polychotomized variables of ISM. The number of participants is used to maintain the semantic relevance and to reflect the narrative of the case study results as proposed by Creamer (2018). As is known, the geometric average of the judgments of participants is best used to reach the common group decision in AHP research. In this context, because the group decision results provide ratio measures and these measures will be transferred to the ISM categories of VAXO, the fifth (number of participants is five) root of the AHP scale (i.e. geometric mean of the scale) is thus calculated to determine the interval to be used in the categorization based on the minimum and maximum values of the measurement results (Khandelwal, Goyal, Kaul & Singhal, 2011). This will help proper and true reflection of measures during data transformation (i.e., categorization of measures according to ISM categories). As is known, the ratio scale conserves four characteristics: equality, ordinality, interval ratios, and value ratios. Since the ratios of the intervals between the numbers are not influenced through harmonious transformations, ratio scales are matchlessly compatible to a harmonious or proportionality transformation (Rasul, Baltzer, & Smith, 2017; Jajuga & Walesiak, 1999). Moreover, the approaches of qualitizing in MMR studies are the use of categories, dichotomization, themes, narratives, and typologies (Tashakkori & Teddlie, 1998; Heyvaert et al., 2016; Nzabonimpa, 2018).

In light of this information, this study adopts the "follow-up explanations design" (Creswell and Clarke, 2007). Within this, "embed quantitative data in a qualitative design" is applied as a mixing approach (Creswell and Clarke, 2007, p. 80).

The QUAL data collection step within the follow-up model (Figure 1) is performed via qualitizing through transformation based on quantitative analysis results rather than composing of qualitative/quantitative data sets as indicated via arrows. There is only one example using MMR based on one data set (i. e., Witcher, Onwuegbuzie, & Minor, 2001). Witcher et al. (2001) studied instructors' perceptions of the characteristics of decent teachers. They gathered quantitative data yet then converted those data into six common classifications (e.g., student-centeredness, enthusiasm). This study differs in that it uses an MMR design within a case study and decision making techniques.

Case study approach in MMR

This study performs data collection, data processing and interpretation of analysis results within a case study approach. A case study is a good approach in MMR. For example, Creamer (2018) proposed mixing methods by linking qualitative and quantitative data in a case study. He states that there is a gap within the MMR practice in the literature when focusing on qualitizing by exclusively using quantitative data. In this context, this study serves as a reference to this gap.

As is known from literature, qualitative research is multi-method and interpretive in nature, often a reflection of its subject content. In other words, qualitative researchers examine subjects in their innate settings, committing to interpret phenomena according to the meaning individuals attribute to them (Denzin & Lincoln, 1994: 2). Hence, the case study approach is well suited to MMR (Luck, Jackson, & Usher, 2006). Moreover, the case study is not seen as a method since there is neither an accepted set of prescribed data collection and analytical procedures nor a set of philosophical or methodological assumptions that limit its adaptability to one type of method (Luck, Jackson, & Usher, 2006). Additionally, qualitized data can be incorporated into a case study that considers the mutual interplay between elements of the context and the phenomenon of interest (Creamer, 2018). Hence, the explanatory design within this study reflects the factuality of the case study.

DATA ANALYSIS AND RESULTS

Building of ISM

Within the MMR design, the rest of the steps of ISM are followed regularly. As mentioned, the third step of ISM is building of SSIM matrix.

Structural self-interaction matrix

Development of SSIM is realized by pairwise comparison of elements. Elements are called as enablers. Presence of a relation between any two elements (i and j) and the correlated direction of the relation is examined. Four symbols represent the pairwise relationships between the elements i and j:

- (a) V: enabler i will facilitate enabler j;
- (b) A: enabler j will facilitate enabler i;
- (c) X: enabler i and j will facilitate each other; and
- (d) O: enablers i and j are unrelated (independent to each other).

This step deals with the building of the reachability matrix of M. It is a binary matrix since the entry V, A, X and O of the SSIM are transformed into 1 and 0 as per the above rules. A redefined AHP-type questionnaire

Table 2. Qualitizing AHP results into ISM.

icipant 1	icipant 2	icipant 3	icipant 4	icipant 5	Group Judgment (geometric average of responses)	ISM categories of VAXO*			
Part	Part	Part	Part	Part					
1	1	1	7	1	1.475	V			
1/3	1	5	4	1/3	1.173	Х			
1	1/5	1	3	1	0.902	0			
1/3	1/7	4	6	1/3	0.824	Х			
1/3	1	1	3	1/3	0.802	Х			
1	4	1	1	1	1.319	V			
1/4	1/2	1/5	7	1/3	0.565	А			
1	7	1	1/6	1	01.03	0			
1/4	1/9	2	1/7	1/5	0.272	А			
1	5	4	1/3	1	1.461	V			
1/3	1/7	5	8	1/3	0.912	0			
3	1	1	1/3	3	1.245	Х			
1	2	2	7	1	1.947	V			
4	5	4	1	4	3.169	V			
1/3	1/7	1	1	1/2	0.473	А			
1/4	1/5	4	1/8	4	0.574	А			
1	1	3	1	1	1.245	Х			
1/3	1/7	6	1/3	1/3	0.794	Х			
1	1	5	1/3	1	1.107	0			
1/3	1/6	3	3	1/2	0.757	A			
1	1/9	1/4	3	1	0.607	А			
*Int	erva	ıl va	lue (calculate	d for categorization of AHP group resu	ılts for ISM)			
Upp	per b	oun	ıd (1	.55 = 5√9	$(0) - \text{Lower Bound } (1.00 = 5\sqrt{1}) / 4 \text{ (i.e. I)}$	SM categories			
of V	'AX	U)≘	±0.1	4. then th	the categories of ISM (VAXO); for $i \rightarrow$	j:1-1.14			
equ	ais t	o O;	1.1: to O	5-1.29 equ	has to X ; 1.30 and above equals to V . fo	$r_j \rightarrow j: 1.00-$			
0.07	0.87 equals to O; 0.86-0.77 equals to X; 0.76 and under equals to A								

is used to make a pairwise comparison of enablers (i.e. types of tourism), as shown in Table 1. For example, to compare gastronomy tourism versus hunting tourism, the subsequent expressions were given to each participator: when assessing the core value (core tourism type) of Burdur as a tourism destination, gastronomy tourism i) has no relationship with hunting tourism, ii) weakly facilitates hunting tourism, iii) strongly facilitates hunting tourism, iv) demonstratively facilitates hunting tourism. The five statements correspond respectively to enabling weightings of 1, 3, 5, 7, and 9 as shown in Table 1.

Relying on the experts' responses, the structural self-interaction matrix (SSIM) was developed for the seven tourism types as enablers of each other. The SSIM is depicted based on the transformed pairwise comparison and presented in Table 3. For example, enabler 1 (hunting tourism) would facilitate enabler 2 (i.e., *rural tourism*). This relationship has been entered as "V" in Table 3.

Table 3. Structura	l self-interaction	matrix	(SSIM)
--------------------	--------------------	--------	--------

Serial								
	Enablers	7	6	5	5	4	3	2
no.								
1	Hunting tourism	V	Х	Х	Х	02	X	V
2	Rural tourism	0	V	А	А	0.	A	
3	Herbal tourism	А	V	V	V	Х		
4	Nature-base sports tourism	Х	Х	А	А			
5	Eco tourism	А	0					
6	Gastronomy tourism	А						
7	Historical-heritage tourism							

Reachability matrix level partitioning

A structural self-interaction matrix was utilized to build the reachability matrix, showing the relationships among the variables in binary form. This is accomplished by properly assigning V, A, X and O by 1 and 0 with reference to the following rules:

- If the (i, j) entry in the SSIM is V, then the (i, j) entry in the reachability matrix becomes 1 and the (j, i) entry becomes 0;
- If the (i, j) entry in the SSIM is A, then the (i, j) entry in the reachability matrix becomes 0 and the (j, i) entry becomes 1;
- If the (i, j) entry in the SSIM is X, then the (i, j) entry in the reachability matrix becomes 1 and the (j, i) entry also becomes 1; and
- If the (i, j) entry in the SSIM is O, then the (i, j) entry in the reachability matrix becomes 0 and the (j, i) entry also becomes 0.

Here the transitivity are given attention and creates the relationship between various enablers. It is a basic assumption in ISM that leads to the final reachability matrix. It states that if element A is related to B and B is related to C, it may be inferred that A is related to C. Indirect relationships are determined by raising the initial reachability matrix (with diagonal entries set to 1) to consecutive powers until no new entries are received (Malone, 1975). Thus, the final reachability matrix is given in Table 4. Depending on their driving and dependence power, the types of tourism will later be classified as autonomous, dependent, linkage and independent through MICMAC analysis.

The final reachability matrix leads to the reachability and antecedent set for each types of tourism (Warfield, 1974). The reachability set R (s_i) of the element s_i is the set of elements determined in the columns that comprise 1 in row s_i . Likewise, the antecedent set A (s_i) of the element s_i is the set of elements determined in the rows which comprise 1 in the column s_i (Pfohl, Gallus, & Thomas, 2011).

When intersection set and reachability set coincides, then top level is appointed and the variable is excluded

Serial									
	Enablers	1	2	3	4	5	6	7	Driving
no.									
1	Hunting tourism	1	1	1	1^{a}	1	1	1	7
2	Rural tourism	0	1	0	1a	0	1	1a	4
3	Herbal tourism	1	1	1	1	1	1	0	6
4	Nature-base sports tourism	$_1a$	$_1a$	1	1	0	1	1	6
5	Eco tourism	1	1	0	1	1	1^{a}	0	5
6	Gastronomy tourism	1	0	0	1	1^{a}	1	0	3
7	Historical-heritage tourism	0	1a	1	1	1	1	1	6
Depen	dence	5	6	4	7	5	7	4	38

Table 4. Final reachability matrix.

from ensuing step, until the methodology creates a last cycle, which thus prompts the most minimal level. Table 5 demonstrates the primary cycle wherein the hunting tourism (1) was found at Level I on the grounds that the reachability and intersection set for variable 1 totally coincide. Subsequently, cycles were rehashed until the level of every variable was acquired. This entire process finalized in six iterations and six levels have been presented in bold font as shown in Table 5.

- *Reachability set*: Element itself and all other elements which it may assist to achieve.
- *Antecedent set*: Element itself and all other elements that assist in achieving it.

Level	Serial no.	Reachability set	Antecedents set	Intersection set
	1	1,2,3,4,5,6,7	1,3,4,5,6	1,3,4,5,6
	2	2,4,6,7	1,2,3,4,5,7	2,4,7
	3	1,2,3,4,5,6	1,3,4,7	1,3,4
Ι	4	1,2,3,4,6,7	1,2,3,4,5,6,7	1,2,3,4,6,7
	5	1,2,4,5,6	1,3,5,6,7	1,5,6
	6	1,4,5,6	1,2,3,4,5,6,7	1,4,5,6
	7	2,3,4,5,6,7	1,2,4,7	2,4,7
	1	1,2,3,5,7	1,3,5	1,3,5
II	2	2,7	1,2,3,5,7	2,7
	3	1,2,3,5	1,3,7	1,3
	5	1,2,5,	1,3,5,7	1,5
	7	2,3,5,7	1,2,7	2,7
	1	1,3,5,7	1,3,5	1,3,5
ш	3	1,3,5	1,3,7	1,3
111	5	1,5	1,3,5,7	1,5
	7	3,5,7	1,7	7
	1	1,3,7	1,3	1,3
IV	3	1,3	1,3,7	1,3
	7	3,7	1,7	7
V	1	1,7	1	1
v	7	7	1,7	7
VI	1	1	1	1

Table 5. Enabler level iteration method

Developing a conical matrix

All the rows and column of the reachability matrix were reorganized with reference to their level in iteration step (Table 5) to produce conical matrix (Table 6) which was then used in developing the final diagraph (Figure 2). Higher driving power indicates the extent of gravity that the variable has on the other variables whereas higher dependence power indicates the extent to which the variables are influenced by or depends on the other variables. In the final diagraph, only direct relationships is shown and the two transitive lines is kept since the two tourism destination types feed from each other except the other transitive links.

As per the digraph, the three types of tourism - hunting (1), historical-heritage (7) and herbal (3) - appearing at levels VI, V and IV could be grouped as core tourism destination appeals which play a very critical role in forming the Burdur as a tourism destination as they are placed at the base of the hierarchy.

The other types of tourism (eco, rural, naturebase sports, and gastronomy), on the other hand, play the supplementary appeals of the core tourism types. Interestingly, even though these results, the types of tourism are mostly intricate. This shows that the development, marketing and planning of the destination requires a holistic approach to different types of tourism.

Moreover, the outcomes of MICMAC analysis match up with the ISM results. For example, even though the hunting tourism has the highest driving power, it has mutual linkage with the nature-base sports tourism, gastronomy tourism and ecotourism. Gastronomy tourism, nature-base sports tourism and rural tourism at the levels of V and VI have strong dependence on other types of tourism. Tourism planners and decision makers in Burdur need to take into consideration of the multiplier effects of different types of tourism over

Serial	Enablers	4	6	2	5	3	7	1	Driving	Rank
no.									power	
4	Nature-base sports tourism	1	1	1^{a}	0	1	1	1 ^a	6	II
6	Gastronomy tourism	1	1	0	1 ^a	0	0	1	4	IV
2	Rural tourism	1^{a}	1	1	0	0	1^{a}	0	4	IV
5	Eco tourism	1	1^{a}	1	1	0	0	1	5	III
3	Herbal tourism	1	1	1	1	1	0	1	6	II
7	Historical-heritage tourism	1	1	1ª	1	1	1	0	6	II
1	Hunting tourism	1 ^a	1	1	1	1	1	1	7	Ι
Dependen	ce	7	7	6	5	4	4	5	38	
Rank		Ι	Ι	II	III	IV	IV	III		

Table 6. Conical Form of Reachability Matrix with Driving Power and Dependence of Enablers.

each other when orchestrating the sources and making plans.



Figure 2. Final digraph – significant transitivity links shown in dotted lines

MICMAC Analysis

The purpose of MICMAC (Cross-Impact Matrix Multiplication Applied to Classification) analysis is to examine the driving and dependence power of the types of tourism in Burdur as a single tourism destination. In the this step, based on the driving and dependence power of the variables from conical form of reachability matrix, the variables are classified into four categories as autonomous, linkage, dependent, and independent as given in Figure 3. As can be seen in the Figure 3, the most prominent result is that there is no autonomous tourism type in this analysis, which implies that, Burdur as a tourism destination should not be planned and marketed with a locus on a single tourism type but with an integrative manner of all tourism types. In this context, the result of this study is an initial blueprint that points to the interrelationship of different types of tourism in destinations.

DISCUSSION AND IMPLICATIONS

We sought to extend previous research on destination product portfolio development by adopting resource orchestration theory. As Benur and Bramwell (2015) indicate, research comes up short in investigating how primary tourism offerings are inter-connected or how those characteristics are demonstrated in destinations as tourism destinations. Hence, we proposed a case study-based mixed method research design based on decision making techniques for its practice in tourism destinations. In the study, we illustrated leveraging between different types of tourism within a single tourism destination scale.

Building up a well-balanced destination portfolio is complex, as it involves many interactions and synergies among the constituents of the portfolio. Understanding the inherent synergies among the different types of tourism within a defined single tourism destination is possible with proper research techniques. This paper



provides a tailor-made technique for understanding and designing of tourism destination portfolio (i.e., resource orchestration technique) for tourism destinations. Such a technique provides a destinationspecific tool emphasizing the characteristics of the unit of analysis under the case study approach adopted within the mixed-method research design. The proposed approach is very useful for mobilizing, coordinating and deploying (i.e., leveraging) the resources (i.e., different types of tourism) in tourism destinations. For example, the final digraph of ISM and MICMAC analysis results refer to mobilizing. Here, destination decision makers need to pay attention to the inextricably intricate structure of the relationship among the types of tourism. In another word, the intricacy shows that rather than economies of scale, creating a well-orchestrated scope of scale needs to be established for a competitive destination which refers to the coordination. This result shows that, destination decision makers should develop policies considering not only a single type of tourism but a coordination of different types of tourism when *deploying* resources.

This study advances theory sophisticatedly. First, by building an approach based on decision making techniques on how resource orchestration can be operated across a portfolio of different types of tourism within a single tourism destination, we add to our understanding of the development of managerial capabilities for destinations. The resource orchestration practice we have illustrated presents a holistic approach for generating destination level policies and designing operational level strategies when exploring and exploiting resources within the dynamic enviroenment. Second, we add to theory on resource orchestration by replying the call of Sirmon et al. (2011) for more empirical studies on orchestrating a resource portfolio. Previous studies have not discovered if resource orchestration theory can be adapted to tourism firms/destinations portfolio context especially within boundary conditions. Beyond simply adapting resource orchestration theory to destination portfolio development, we have also considered its contingency nature by grounding case study into the theory by proposing a research design, which refers to the third contribution of the study. The proposed approach is not only practical for destinations but the other areas of marketing and management of service organizations in the service industry.

First, by using the proposed approach, future research might analyze the due destination or service product portfolio development in relation to destination coordination. The further research might investigate how the destination coordination can be operated through the proposed approach, especially how the managerial differences can be an advantage when leveraging the resources. Similarly, different industrial clusterings within different contexts such as product life cycles and industrial clock-speeds can be investigated. Second, we have attempted to develop mixed-method research by developing a case-specific research by responding the general call of Creamer (2018) and Sandelowski, Voils, and Knafl (2009). This is proven in that the quantitative and the qualitative data are intertwined during the process of instrument development (Nzabonimpa, 2018). Therefore, the qualitizing approach is essential in drawing context specific conclusions. Qualitized data can be incorporated into case studies that regard the mutual interaction between elements of the context and the phenomenon of interest (Creamer, 2018). Methods

are shaped concerning the nature of the case and the research problems. The case study is thus a platform where the research paradigms come across (Kitchener, 2010; Luck et al, 2006). Similarly, to develop a casespecific MMR design, in the current paper, we have adapted AHP data collection process to ISM since both instruments include pairwise comparison and thus inherently complement each other. Similarity of measurement in both these techniques made data transformation more feasible (i.e., qualitizing approach) within the MMR design. It is known that qualitizing in mixed-methods is more fitting for complementarity than for triangulation (Nzabonimpa, 2018). In this context, as a contribution to the MMR literature, a systematic approach to qualitizing quantitative data is presented to the rising expectation of qualitizing (Creramer, 2018; Nzabonimpa, 2018). Moreover, qualitative research methods like ISM are regarded as appropriate in analyzing managerial capabilities (Danneels, 2011) such as resource orchestration.

Some limitations of the research create potentials for future studies. First, our study is set on a city which draws the boundary of our case destination, our conclusions is provisionary. The resulting model is built on raw case data and theory, which might pioneer to encourage understanding of the studied phenomenon (Eisenhardt & Graebner, 2007). We intended to present a preliminary blueprint of resource orchestration in the context of destination portfolio development. Second, our data, while providing insights on how to integrate theory with methodology, did not present final scope of resource orchestration practices for the case destination. These points present abundant ground for future studies focus on resource orchestration across destinations. There needs to be research empirically reveal and measure the managerial advantages of resource orchestration across destinations in different settings. For instance, under different industrial clock-speeds, how destinations orchestrate resources differently when exploring and exploiting resources can provide important insights. Third, we have explored resource orchestration in terms of destination portfolio development. An important gap that exists is the extent to which our claims apply to different tourism clusterings.

Lastly, this research contributes to practice by enlightening destination decision makers' understanding of the relevance of a portfolio of destinations to differentiate the core and complementary roles of destination attractions. We look forward to our methodological proposition has formed the basis to inspire a future theoretical and empirical research debate in this substantial facet of destination portfolio development.

REFERENCES

Archibald, M. M., Radil, A. I., Zhang, X. & Hanson, W. E. (2015). Current mixed methods practices in qualitative research: a content analysis of leading journals. *International Journal of Qualitative Methods*, 2, 5-33.

Baseley, P. & Kemp, L. (2012). Mosaics, triangles, and DNA: Metaphors for integrated analysis in mixed methods research. *Journal of Mixed Methods Research*, *6*(1), 55-72.

Benur, A. M. & Bramwell, B. (2015). Tourism product development and product diversification in destinations. *Tourism Management*, *50*, 213-224.

Briedenhann, J., & Wickens, E. (2004). Tourism routes as a tool for the economic development of rural areas: Vibrant hope or impossible dream?. *Tourism Management*, *25*(1), 71-79.

Creamer, E. G. (2018). An Introduction to Fully Integrated Mixed Methods Research. USA: SAGE.

Creswell, J. W., Clark, V. L. P., Gutmann, M., & Hanson, W. (2003). Advanced mixed methods research designs', In Tashakkori, A. & Teddlie, C. (Eds.), *Handbook of mixed methods in social and behavioral research* (pp. 209-240). Thousand Oaks, CA: SAGE.

Creswell, J. W. & Clark, V. L. P. (2007). *Designing and conducting mixed methods research*. California: SAGE.

Crouch, G.I., & Ritchie, J. R. Brent. (2000). The competitive destination: A sustainability perspective. *Tourism Management*, *21*(1), 1-7.

Danneels, E. (2011). Trying to become a different type of company: dynamic capability at Smith Corona. *Strategic Management Journal*, *32*(1), 1-31.

Denzin, N., and Lincoln.Y. (1994). *Handbook of Qualitative Research*. Thousand Oaks, CA: SAGE.

Eisenhardt, K. M. & Graebner, M. E. (2007). Theory building fromcases: opportunities and challenges. *Academy of Management Journal*, *50*(1): 25-32.

Ferri, M. A. & Aiello, L. (2017). Tourism destination management in sustainability development perspective, the role of entrepreneurship and networking ability: Tourist Kit. *World Review of Entrepreneurship, Management and Sustainable Development, 13, 5-6.*

Fyall, A., & Garrod, B. (2004). *Tourism marketing: A collaborative approach*. Clevedon, UK: Channel View Publications.

George, B. P., Henthorne, T. L. & Williams, A. W. (2016). Attraction diversity index: the concept, measure, and its relation with tourism destination competitiveness. *Turismo: Estudos and Práticas (RTEP/UERN)*, 5(2), 9-29. Green, C. A., Duan, N., Gibbons, R. D., Hoagwood, K. E., Palinkas, L. A. & Wisdom, J. P. (2015). Approaches to Mixed Methods Dissemination and Implementation Research: Methods, Strengths, Caveats, and Opportunities. *Administration and Policy in Mental Health.* 42(5), 508-523.

Greene, J. C., Caracelli, V. J., & Graham, W. F. (1989). Toward a conceptual framework for mixed-method evaluation designs. *Educational Evaluation and Policy Analysis*, 11(3), 255-274.

Greffe, X. (1993). Is rural tourism a lever for economic and social development? In B. Bramwell, & B. Lane (Eds.), *Rural tourism and sustainable rural development* (pp. 22-40) Clevedon: Channel View Publications.

Heyvaert, M., Hannes, K., & Onghena, P. (2016). Using Mixed Methods Research Synthesis for Literature Reviews. Thousand Oak: SAGE Mixed Method Research Series.

Helfat C, Finkelstein S, Mitchell W, Peteraf M, Singh H, Teece D, Winter S. (2007). *Dynamic Capabilities: Understanding Strategic Change in Organizations.* Malden, MA: Blackwell.

Hitt, M. A., Ireland, R. D., Sirmon, D. G., & Trahms, C. A. (2011). Strategic entrepreneurship: creating value for individuals, organizations, and society. *Academy of Management Perspectives*, *25*, 57-75.

Jajuga, K. & Walesiak, M. (1999). Standardisation of data set under different measurement scales in classification and information processing at the turn of the millennium. In Decker, R. and Gaul, W. (Eds.), *Proceedings of the 23rd Annual Conference of the Gesellschaft fur Klassifikatione. Y.*, (pp. 105-113). Germany: University of Bielefeld,.

Jorgensen, D. L. (1989). Participant Observation: A Methodology for Human Studies. Newbury Park, CA: SAGE.

Khandelwal, S., R. Goyal, N. Kaul, & Singhal, V. (2011). *Study of land surface temperature variations with distance from hot spots for urban heat island analysis*, (Paper reference no: PN-367). Geospatial World Forum, Theme Dimensions and Directions of Geospatial Industry, Hyderabad (India).

Kortmann, S., Gelhard, C., Zimmermann, C. & Piller, F. T. (2014). Linking strategic flexibility and operational efficiency: the mediating role of ambidextrous operational capabilities. *Journal of Operations Management*, *32*(7-8), 475-490.

Luck, L., Jackson, D. & Usher, K. (2006). Case study: a bridge across the paradigms. *Nursing Inquiry*, 13(2), 103-109.

Malone, D. W. (1975). An introduction to the application of interpretive structural modeling, *Proceedings of the IEEE*, 63(3), 397-404.

Morse, J. M. (1991). Approaches to qualitativequantitative methodological triangulation. *Nursing Research*, 40, 120-123.

Nzabonimpa, J. P. (2018). Quantitizing and qualitizing (im-)possibilities in mixed methods research. *Methodological Innovations, May-August*, 1-16.

OECD (2016), OECD Tourism Trends and Policies 2016, Paris: OECD Publishing.

Pfohl, H. C., Gallus, P., & Thomas, D. (2011). Interpretive structural modeling of supply chain risks. *International Journal of Physical Distribution and Logistics Management*, 41(9), 839-859.

Porter, M. (1998). Clusters and the new economics of competition. *Harvard Business Review November-December*, 77-90.

Rasul, A., Balzter, H. & Smith, C. (2017). Applying a normalized ratio scale technique to assess influences of urban expansion on land surface temperature of the semi-arid destination of Erbil. *International Journal of Remote Sensing*, *38*(13), 3960-3980.

Saaty, T. L. (2008). Decision making with the analytic hierarchy process. *International Journal of Services Sciences*, 1(1), 83-98.

Saaty, T. L. (1980). *The Analytic Hierarchy Process*, NY: McGraw-Hill.

Sandelowski, M., Voils, C. I. & Knafl, G. (2009). On quantitizing. *Journal of Mixed Methods Research*, 3(3), 208-222.

Sandelowski, M. (2000). Combining qualitative and quantitative sampling, data collection, and analysis techniques in mixed-method studies. *Research in Nursing and Health, 23*, 246-255.

Sandelowski, M., Voils, C. I. & Barroso, J. (2006). Defining and designing mixed research synthesis studies. *Research in the Schools*, *13*, 29-40.

Sirmon, D. G., Hitt, M. A., Ireland, R. D. (2007). Managing firm resources in dynamic environments to create value: looking inside the black box. *Academy of Management Review*, *32*, 273-292.

Sirmon, D. G., Hitt, M. A., Ireland, R. D. & Gilbert, B. A. (2011). Resource Orchestration to Create Competitive Advantage: Breadth, Depth, and Life Cycle Effects. *Journal of Management*, *37*(5), 1390-1412.

Tashakkori, A & Teddlie, C. (1998). *Mixed Methodology: Combining Qualitative and Quantitative Approaches.* Thousand Oaks, CA: SAGE.

Teddlie, C., & Tashakkori, A. (2009). Foundations of mixed methods research: Integrating quantitative and qualitative approaches in the social and behavioral sciences. Thousand Oaks, CA: Sage.

Wales, W. J., Patel, P. C., Parida, V., & Kreiser, P. M. (2013). Nonlinear effects of entrepreneurial orientation on small firm performance: the moderating role of resource orchestration capabilities. *Strategic Entrepreneurship Journal*, *7*(2), 93-121.

Watson, R. H. (1978). Interpretive structural modeling - a useful tool for technology assessment?. *Technological Forecasting and Social Change*, *11*(2), 165-85.

Warfa A. M. (2016). Mixed-methods design in biology education research: Approach and uses. *CBE-Life Sciences Education*, 15(4), 1-11.

Warfield, J. W. (1974). Developing interconnected matrices in structural modeling. *IEEE Transcript on Systems Men and Cybernetics*, 4(1), 51-81.

Wang, Y., & Fesenmaier, D. (2007). Collaborative destination marketing: A case study of Elkhart County, Indiana. *Tourism Management*, *28*, 863-875.

Wisdom J. & Creswell, J. W. (2013). *Mixed Methods: Integrating Quantitative and Qualitative Data Collection and Analysis While Studying Patient-Centered Medical Home Models* (Publication No. 13-0028-EF). Rockville, MD: Agency for Healthcare Research and Quality.

Witcher A, Onwuegbuzie, A. J. & Minor, L. C. (2001). Characteristics of effective teachers: perceptions of preservice teachers. *Res Schools*, *8*, 45-57.