

Tourist expertise and pre-travel value co-creation: Task-related processes and beyond

Ainhize Eletxigerra^{1,2,*}, Jose M. Barrutia¹, Carmen Echebarria¹

¹University of the Basque Country (UPV/EHU), Faculty of Economics and Business.
Governance and Marketing for Sustainability research group
Institute of Applied Business Economics
Avenida Lehendakari Agirre 83, 48015 Bilbao, Spain.

²University of Aveiro, Department of Economics, Management, Industrial Engineering and
Tourism (DEGEIT)^a.
Campus Universitário de Santiago, 3810-193 Aveiro, Portugal

Telephones: +34 94 601 3678^{*}; +34 94 601 3861, +34 94 601 3887
E-mails: ainhize.eletxigerra@ehu.eus^{*}; josemaria.barrutia@ehu.eus;
carmen.etxebarria@ehu.eus

* Corresponding author

All authors have participated in all the parts of the paper and along the whole research process, contributing to the final manuscript according to the order set above.

Acknowledgements

The research was supported by the Spanish Government [grant number ECO2016-76348-R]; the Basque Government [IT-1354-19; POS_2019_1_0011; PRE_2017_2_009]; and the Feside Foundation.

^a Present address

Highlights

- Co-creation of value in tourism involves task- and mind-related processes.
- Mental time travel provides benefits with no costs.
- Tourist expertise leads to more active mental and physical participation.
- Companies should pay attention to tourist co-creation at the pre-travel stage.
- Companies may devise their communication strategies to foster consumer knowledge.

Tourist expertise and pre-travel value co-creation: Task-related processes and beyond

Abstract

Our knowledge of how tourists could co-create value in the pre-travel stage is limited. This should be particularly worrying for tourism providers, as they could gain competitive advantage by improving their understanding of these processes and responding accordingly. Based on service-dominant logic, this study explores this gap in research by identifying three value co-creation processes that occur before a trip (travel organization, information seeking, and mental time travel) and examining the contribution of tourist expertise on each of these processes. Although previous studies tend to assimilate co-creation with “tasks,” this study focuses on mental time travel, which is the only pre-travel value co-creation process that contributes value to the consumer without involving costs. An empirical study with 984 French and Spanish tourists was conducted, the results of which corroborate the particular salience of expertise predicted by service-dominant logic.

Keywords: Co-creation; tourism experience; pre-travel; expertise; mental time travel; service-dominant logic.

1. Introduction

A tourist's experience is a multifaceted and multistage concept that involves various experiences before, during (on-site), and after travel (Clawson & Knetsch, 1966).

Specifically, the tourism experience can be defined as an "individual's subjective evaluation and undergoing (i.e., affective, cognitive, and behavioral) of events related to his/her tourist activities which begins before (i.e., planning and preparation), during (i.e., at the destination), and after the trip (i.e., the recollection)" (Tung & Ritchie, 2011, p. 1369).

Of all three phases, researchers and practitioners have predominantly focused on the on-site stage. For example, the number of studies in the Web of Science in July 2020 referring to the on-site tourism experience (367) outnumbers the ones focused on pre- (75) and post-travel (45) experiences. This may be because, during the trip, 'experience providers' (e.g., service employees and managers, public institutions, and destinations) (Bharwani & Jauhari, 2013) play a leading role in explaining the value perceived from the travel experience, as they provide services that include hotel accommodation, museums, public transportation, tourist bureaus, beautiful landscapes, and so on.

However, the widely shared view of the multiphase tourism experience (Prebensen, Chen, & Uysal, 2018; Stewart & Vogt, 1999) recognizes that value can be co-created in each of the three travel stages to form an overall value of the whole experience (Neal & Gursoy, 2008; Prebensen et al., 2012). This research is focused on the pre-travel stage, which involves travel planning and anticipation and has the potential to create value for tourists and destinations.

In the pre-trip phase, as in the rest of the tourism experience, consumers (i.e., tourists) play a salient role. In contrast to the traditional view where providers are value creators and consumers are value destroyers, several authors have argued from different perspectives (e.g., service-dominant (S-D) logic, service logic, service science, consumer culture theory) that

1 consumers actively participate in experience value (Cova, Dalli, & Zwick, 2011; Grönroos,
2 2008; Maglio & Spohrer, 2008; Prahalad & Ramaswamy, 2004; Prebensen, Woo, et al.,
3 2013; Vargo & Lusch, 2004). The term *value co-creation* was coined to emphasize the
4 contribution made by consumers (Bharti, Agrawal, & Sharma, 2015; Chathoth et al., 2013;
5 Galvagno & Dalli, 2014; Harrison & Waite, 2015; Voorberg, Bekkers, & Tummers, 2015).
6

7 While value co-creation has sometimes been viewed as dual processes of interaction between
8 providers and consumers (e.g., Grönroos & Voima, 2013), S-D logic conceptualization is
9 more holistic. Vargo and Lusch (2016, p. 8) define value co-creation as “the actions of
10 multiple actors, often unaware of each other, that contribute to each other’s wellbeing.” This
11 definition includes customer value-creating processes, provider value-creating processes and
12 encounter processes, as suggested by Payne, Storbacka, and Frow (2008), and also processes
13 involving other actors such as friends and relatives or local citizens at the destination.
14

15 Therefore, co-creation processes may involve only one actor (e.g., consumer or provider),
16 may be dual or multi-actor, and may be interactional or not. What matters is that all these
17 processes affect the total experience value determined by customers. The term ‘actions’ is
18 also broadly understood as including task- and mind-related processes that may be conscious
19 and unconscious (Payne et al., 2008). We draw on Vargo and Lusch’s (2016) view to address
20 co-creation of value as a non-optional, positive statement.
21

22 In our context, Prebensen and her colleagues (Prebensen, Vittersø, & Dahl, 2013; Prebensen,
23 Woo, & Uysal, 2014) argued that tourists provide important input in the pre-travel process by
24 planning their journey, deciding and discussing their destination, booking hotels and flights,
25 imagining the future experience, and enjoying these moments. Relying on the value co-
26 creation concept from Vargo and Lusch (2016), in such situations, tourists are co-creating
27 value by interacting with service providers (e.g., travel agencies, hotels, airlines) (or not), and
28

1 using inputs from service providers (or not), as long as all these processes contribute to a
2 perception of the total value of the customer experience, which is co-created. While co-
3 production is optional (e.g., a tourist may organize their trip or use a travel agency), co-
4 creation always occurs, even unconsciously and in isolation (e.g., tourists enjoy imagining
5 themselves with their family at the destination).
6
7
8
9
10

11
12 So far, tourism literature has examined the pre-trip stage focusing on decision-making
13 (Gursoy & McCleary, 2004; Litvin, Goldsmith, & Pan, 2008; Munar & Jacobsen, 2014;
14 Xiang & Gretzel, 2010) and motivations for travel (Yoon & Uysal, 2005). However, the
15 value that is co-created and perceived during that phase has been rather neglected. In a highly
16 competitive and complex sector such as tourism, it becomes of paramount importance for
17 experience providers to study new methods that contribute to increasing the value perceived
18 by consumers and thus gain competitive advantage. To do so, acquiring a systematic
19 knowledge of how consumers participate in the co-creation of value in the pre-travel stage
20 may be a good opportunity, because it implies that customers' perception of value could
21 increase with a relatively low cost for providers. It is, therefore, necessary to fully understand
22 how value is co-created in the tourist's sphere before traveling and which factors can enhance
23 such value co-creation processes (i.e., antecedents). If firms (e.g., hotels) are concerned about
24 training and managing their employees in order to provide greater service quality and
25 increase customers' perceived value, they should also look at how customers co-create value
26 in the pre-travel stage.
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49

50 Although several authors have addressed experience co-creation in tourism (Assiouras et al.,
51 2019; Binkhorst & Den Dekker, 2009; Buhalis & Sinarta, 2019; Buonincontri & Micera,
52 2016; Campos et al., 2018; Sugathan & Ranjan, 2019), there is still not a systematic and
53 interlinked understanding of the pre-travel co-creation processes and their antecedents. As a
54
55
56
57
58
59
60
61
62
63
64
65

1 result of the difficulty to conceptualize and operationalize value co-creation, other similar or
2 related ideas have usually been adopted in empirical research (e.g., engagement,
3 participation). What is more, some forms of co-creation have not been addressed, regardless
4 of their contribution to perceived tourist value. This is true of cognitive, mental processes
5 consisting of imagining the trip before going to the destination, which adds value to the
6 experience and can increase customer's well-being. Some authors have paid particular
7 attention to this pre-elaboration process (e.g., fantasy, reverie, daydreaming) and the value of
8 satisfaction that it can give (Parrinello, 1993). Current literature is, however, more focused on
9 co-production and other provider-oriented views (Deng et al., 2020; Lei et al., 2020).

10
11
12
13
14
15
16
17
18
19
20
21
22
23 The objective of the paper is, therefore, to take a step toward covering this gap in knowledge
24 by analyzing the processes of value co-creation before traveling and its antecedents from the
25 tourist's perspective. Going beyond the narrow, business-driven views of value co-creation
26 (i.e., co-production) (Cova & Dalli, 2009; Etgar, 2008), S-D logic proposes a new paradigm
27 for (resource-based) consumer marketing that relies on resource integration and an
28 ecosystemic view (Vargo & Akaka, 2012; Vargo & Lusch, 2004, 2008, 2016). S-D logic is
29 highly relevant in experiential contexts such as tourism and, therefore, is a suitable
30 framework for addressing the effect that tourists have on their pre-travel experiences and co-
31 created value (Blazquez-Resino, Molina, & Esteban-Talaya, 2015; Evans, 2016; Shaw,
32 Bailey, & Williams, 2011).

33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48 Building on S-D logic as a framework and using insights from previous tourism research, we
49 depict and test a model with the aim of responding to the following research questions (RQs):

50
51
52
53
54 RQ1. What is co-creation before travel, and what does it entail?

55
56
57
58 RQ2. What tourist resources influence pre-travel co-creation processes?

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65

RQ3. What specific effects do tourist resources have on those co-creation processes?

By answering these questions, we will contribute knowledge to tourism literature about how and where value is co-created in travel-consumption processes (Rihova et al., 2015). Another contribution is the approach itself, as the model is based on a relatively novel view of marketing (S-D logic) that has potential to improve our understanding of tourism and help us build an alternative, contextualized, and multidimensional tool to measure the pre-travel co-creation of value. Finally, by identifying its great potential to explain mental co-creation processes (imagining the trip), we introduce the concept of mental time travel (MTT) into the value co-creation model. MTT is a concept that has been largely studied in psychology, neuroscience and behavioral sciences, though unattended in tourism research.

The remaining structure of the paper is as follows. Section 2 provides a theoretical framework about co-creation, explaining tourist resources and pre-travel co-creation processes, together with the choices made regarding the variables considered in the study (proposed model). Section 3 sets out the hypotheses of the study, where the link between tourist resources and pre-travel co-creation processes is drawn. In Section 4, the research methodology is briefly explained. Section 5 presents the results obtained. Finally, Sections 6, 7, and 8 provide a discussion of the results, some of the managerial implications, and the limitations of the study and future research avenues.

2. Theoretical background and proposed model

According to S-D logic, value co-creation consists of service exchange and resource integration (Vargo & Lusch, 2016). Although Vargo and Lusch (2004, 2008, 2016) do not provide a systematic understanding of what service-for-service exchange and resource integration mean, it can be deduced from further elaborations on S-D logic (Colurcio, Caridà, & Edvardsson, 2017; Ranjan & Read, 2016) that experience co-creation in tourism is an

1 extensive set of processes that involves tourists carrying out a great variety of task- and mind-
2 related actions that occur before, during, and after a trip in all the travel-related environments.
3
4 Co-creation usually, but not necessarily, involves interaction with others (tourism service
5 providers, local people, other tourists, family and friends, etc.). Imagining the forthcoming
6 trip and recalling the experience afterwards are actions often performed without others
7
8 (Eletxigerra, Barrutia, & Echebarria, 2018). Current tourism literature usually ignores these
9
10 conceptual underpinnings, and co-creation is consequently misunderstood as a task-related
11
12 process (Vargo & Lusch, 2016), where customers perform activities as part-time employees.
13
14 These task-related activities include collaborating and working with the staff to achieve
15
16 better, more personalized services (Lei et al., 2020), co-producing souvenirs (Deng et al.,
17
18 2020), and arranging the trip (Dekhili & Hallem, 2020). Other studies include customer
19
20 behaviors such as tolerance, helpfulness, advocacy, feedback and responsible behavior
21
22 towards service employees and other tourists (Yen, Teng, & Tzeng, 2020). However, all these
23
24 processes are focused on increasing the provider's value, rather than the tourist's experience
25
26 value.
27
28
29
30
31
32
33
34
35
36

37 Transcending these approaches and building on S-D logic and tourism literature, we propose
38
39 that tourists co-create value by means of task-related activities (cognitive and interactive
40
41 behaviors) and mind-related processes (feelings and thoughts), which are more subconscious
42
43 and private in nature. Therefore, value co-creation is not just comprised of customers'
44
45 physical participation (Gummesson & Mele, 2010; Nambisan & Baron, 2009; Storbacka et
46
47 al., 2016), but also new dimensions based on mental, symbolic, emotional, and sometimes
48
49 unconscious participation (Galvagno & Dalli, 2014; Payne et al., 2008; Prebensen, Kim, &
50
51 Uysal, 2016).
52
53
54
55
56
57
58
59
60
61
62
63
64
65

1 Following Aho (2001), among others, we propose that the entire tourist experience
2 commences with orientation and attachment as an enjoyable anticipation of the trip while
3
4 organizing it. At this stage, consumers may play a particularly prominent role in travel
5
6 organization and information seeking (Fesenmaier et al., 2011; Grisse-
7
8 mann & Stokburger-
9
10 Sauer, 2012; Zhang, 2020).

11
12 Firstly, travel organization is defined as a task-related co-creation process consisting of
13
14 customers' provision of input when preparing their travel arrangements (Grisse-
15
16 mann &
17
18 Stokburger-Sauer, 2012). Due to technological advances, more and more travelers are
19
20 organizing their own trips. As a result of social networks and the increasingly available
21
22 information, tourists now contribute a lot to the travel organization process by providing
23
24 ideas, booking plane tickets or rooms, and making online payments. Therefore, in this new
25
26 environment, tourists are able to organize made-to-measure tours without the intermediation
27
28 of brick-and-mortar travel agents.
29
30

31
32 Secondly, information seeking is necessary in tourism for selecting a destination,
33
34 accommodation, transport, and activities (Gursoy & McCleary, 2004). Information seeking
35
36 has been defined in terms of collecting information from a variety of sources in the
37
38 marketplace (external search) (Cross, Rice, & Parker, 2001; Engel, Blackwell, & Miniard,
39
40 1995), and it is thought to clarify service requirements, reduce uncertainty, and transmit clues
41
42 about service status, service parameters, and performance tasks (Kellogg, Youngdahl, &
43
44 Bowen, 1997).
45
46
47
48
49
50

51
52 While adopting a comprehensive perspective of co-creation, we focus primarily on the mental
53
54 processes, as these have been little studied. This omission is surprising, as several authors
55
56 recognize that tourists establish a cognitive connection with the future travel experience by
57
58 anticipating images, thoughts, sensations, and perceptions (Bertella, 2014; Campos et al.,
59
60
61
62
63
64
65

1 2018; Volo, 2009). This connection is thought to lead to a preliminary level of interest and
2 engagement of tourists towards the coming experience (Mathisen, 2013; Prebensen & Xie,
3 2017). However, this idea has not been systematically developed and operationalized. In the
4 absence of specific constructs in tourism and co-creation literature, we will rely on MTT.
5 Unlike other more diffuse ideas, MTT benefits from a great conceptual background in other
6 areas such as psychology, neuroscience, and behavioral sciences, and could be applied to
7 consumer (tourist) behavior.
8

9
10
11
12
13
14
15
16
17
18 MTT, used in a metaphorical way, refers to “the faculty that allows humans to mentally
19 project themselves backwards in time to re-live, or forwards to pre-live, events” (Suddendorf
20 & Corballis, 2007, p. 299). In this paper, we focus on pre-lived events or MTT into the
21 future. MTT into the future might include the planning of some specific event, such as a
22 dinner party, or it might involve the mental anticipation of some event that we know to be
23 scheduled for some future date, such as a job interview or, in our case, a vacation trip
24 (Suddendorf & Corballis, 2007). Even though the mental construction of potential future
25 episodes has only recently begun to attract attention (Suddendorf & Corballis, 2007), we
26 found in tourism research a related perspective that refers to tourists’ previous thoughts and
27 ideas about their future experiences (Kastenholz, Carneiro, & Peixeira Marques, 2012).
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42

43 Visualizing the trip well before going on a trip (MTT) is closely related to mental imagery
44 theory. In the tourism context, mental imagery theory proposes that “when travelers engage
45 in mental imagery processing, they experience the destination in their mind’s eye” (Lee &
46 Gretzel, 2012, p. 1270), providing a sensory and virtually shaped experience of the future
47 event. This capacity of tourists that allows them to foresee, plan, or simulate events that
48 might occur in their personal future allows tourists to project themselves to the setting, living
49 their experiences even before they have traveled (Debus, 2014; Dann, 1996; Malek, Berna, &
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65

1 D'Argembeau, 2018). As a process MTT matches the nature of tourists' mental co-creation
2 before traveling (MacInnis & Price, 1987). In this paper, MTT is approached as the most
3 clear pre-travel experience value and the outcome of task-related co-creation processes.
4 While both information seeking and travel organization involve costs (e.g., time, money,
5 effort) and benefits (e.g., personalization of the trip, lower prices) for the tourist, MTT
6 provides only benefits in terms of mental enjoyment (Van Boven & Ashworth, 2007). In the
7 words of Ainslie (2007), "people's practices of constructing foresight could be said to fall
8 into hedonic accounts" (p. 314). Specifically, he argues that time travel is performed by its
9 reward or entertainment value (i.e., emotional impact) in the here and now, just as it happens
10 to individuals who enjoy imagining food as much as eating it (Rhue & Lynn, 1987).

11 In value co-creation processes, actors integrate the resources within reach (i.e., their own
12 resources, provider resources, and resources from other actors) (Baron & Harris, 2008;
13 Paredes, Barrutia, & Echebarria, 2014; Vargo & Lusch, 2004) to co-create their experiences.
14 Any resource an actor possesses (or has access to) can never be used in isolation but needs to
15 be combined or bundled with other resources for usefulness or value (Lusch & Nambisan,
16 2015). This means that co-creation implies some sort of ability to perform in a certain way or
17 to engage in a specific behavior to achieve a desired goal (Constantin & Lusch, 1994;
18 Kreitner & Kinicki, 2010; Vargo & Lusch, 2004). In tourism literature, some authors have
19 stressed the salience of tourists' capabilities (e.g., previous user experience, cultural
20 background, knowledge) when co-creating their travel-related experiences, such as taking
21 part in adventure-tourism activities (Assiouras et al., 2019; Gardiner & Kwek, 2017; Lei et
22 al., 2020; Plank, 2016; Prayag et al., 2020; Prebensen & Xie, 2017).

23 Based on S-D logic, operant resources, represented by knowledge and skills, are vital
24 resources in value co-creation due to their ability to produce effects (Alves, Ferreira, &

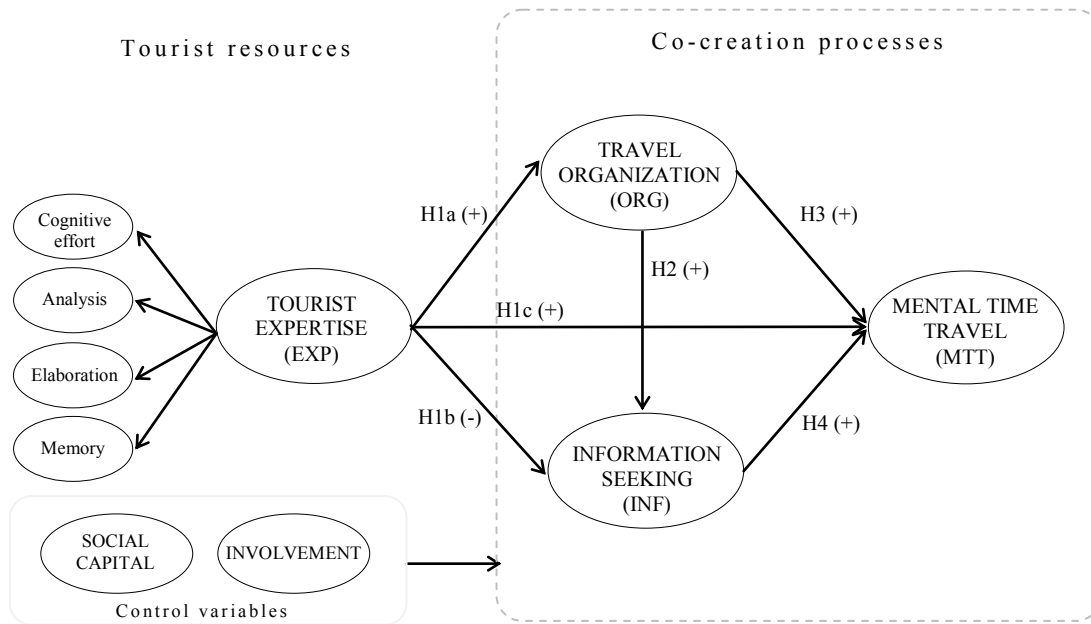
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65

Fernandes, 2016; Vargo & Lusch, 2004). Even if a person has strong behavioral intentions, they need knowledge and skills to engage in a particular type of behavior (Montaño & Kasprzyk, 2015). While different perspectives have been adopted in the literature (Prebensen et al., 2014; Sujan, 1985; Tsaur, Yen, & Chen, 2010), the concept of consumer knowledge has mostly been referred to as product expertise, the most profound component of product knowledge (Cordell, 1997). Expertise is defined as the ability to perform product-related tasks successfully (Alba & Hutchinson, 1987).

The consumer culture theory (CCT) and the resource-based view of the customer address specialized knowledge and skills (i.e., expertise) under cultural resources (Arnould & Thompson, 2005; Arnould, Price, & Malshe, 2006). Despite the latter being the basis for value co-creation, these complementary perspectives also include social and physical (operant) means as vital resources in value co-creation. Social capital and involvement are, therefore, included in our model as control variables, representing the support coming from relationships with the community (family, friends, consumer tribes, etc.) and sensory motor endowment, respectively. Specifically, social capital is defined as the sum of resources that can be accessed, accumulated, or mobilized through one's social network and relationships for some purposeful action (Lin, 2008). While both S-D logic and CCT have emphasized the role of a network of actors and their social operant resources in co-creation processes (i.e., service ecosystems), this role has not been clearly specified. Involvement is understood as an unobservable state of motivation, arousal, or interest that evokes a particular stimulus or situation and has properties of drive (Rothschild, 1984).

Following the above premises, the proposed model is depicted in Figure 1. Here, consumer expertise is viewed as the main antecedent of three interlinked value co-creation processes: travel organization, information seeking, and MTT.

Figure 1. Conceptual model and study hypotheses



3. Hypotheses development

This section is included to justify the specific hypotheses underlying the model proposed.

3.1. Effects of tourist expertise on travel organization, information seeking, and mental time travel

We propose that consumer expertise will drive travel organization, information seeking, and MTT. Firstly, knowledge and skills are recognized by S-D logic and CCT as being important elements of value co-creation. Payne et al. (2008), for instance, suggest that one key aspect of the customers' ability to co-create value is the amount of knowledge and skills they can access and use. Similarly, theories on consumer behavior emphasize the salience of these resources as antecedents of behavior. Lusch, Vargo, and O'Brien (2007) argue that one of the main elements that contributes to co-creation behavior (in this piece, they used the term *co-production*) is likely to be expertise. More specifically, as customers gain more expertise in the product category (i.e., travel), they can better assess where they might make a

1 contribution and assess the attributes of various offerings. Besides, experts may perceive
2 lower decision-making risks, with no fear of producing suboptimal outcomes and with a
3 tendency to need to control all service-related aspects (Auh et al., 2007). On the contrary,
4 lack of expertise is one of the most significant reasons why consumers do not easily adopt
5 new products, especially when a product is perceived as unusual, rare, or difficult to use
6
7 (Montaño & Kasprzyk, 2015).
8
9

10
11
12 Travel organization is a complex task that has traditionally been carried out by professionals.
13
14 According to Mumford, Schultz, and Van Doorn (2001), domain-specific capacities operate
15 together in an integrated planning effort, making it possible for people to identify goals,
16 analyze the environment, and take proper decisions. Today, although the internet has
17 facilitated these tasks for tourists, when organizing a trip, travelers are involved in time- and
18 energy-consuming activities, such as arranging international and local transport, hotels,
19 restaurants, events, places to visit, and so on. Beyond the energy invested in travel
20 organization, many aspects may not properly fit in terms of time, convenience, and budget
21 (e.g., missing a flight due to not having foreseen the time necessary, or not having the
22 necessary authorization), which could discourage people with low expertise. Therefore, the
23 following is expected:
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42

43 H1a. A tourist's expertise will directly and positively affect their level of involvement in
44 travel organization.
45
46
47
48

49 Secondly, in relation to the link between expertise and information seeking, there is no
50 consensus in previous literature (Bettman, 1986). Researchers have questioned whether the
51 relationship is positive and linear, negative, or has an inverted U shape (Kerstetter & Cho,
52 2004). These controversial antecedents stem from two opposing forces. Firstly, experts
53 possess more information and knowledge and have less need to search externally. But
54
55
56
57
58
59
60
61
62
63
64
65

1 secondly, experts perceive lower costs on external searches in comparison to nonexperts, and,
2 consequently, this could increase the usage of information by experts. While recognizing
3
4 contradictory effects, based on Simonson, Huber, and Payne (1988), we tentatively propose a
5
6 negative effect. Therefore, when individuals do not have the required level of knowledge and
7
8 they perceive that their accumulated knowledge on travel-related issues, based on past
9
10 experiences and prior memories, is insufficient or unsatisfactory, they will search for new
11
12 external information (Bettman, 1979).
13
14
15
16

17
18 H1b. A tourist's expertise will directly and negatively affect their information-seeking
19
20 behavior.
21
22

23
24 Finally, building on Boyer (2008), who discussed the link between MTT and high-level
25
26 cognitive functions (i.e., self-knowledge and recalling specific situations), we suggest that
27
28 MTT, in the form of self-constructed sensory future images of the destination, will be less
29
30 diffuse and more vivid in the case of experts. Experts store a great amount of interlinked
31
32 information and images in their brains that can be applied in constructing an imagined future
33
34 event (Berntsen & Jacobsen, 2008; Frías, Rodríguez, & Castañeda, 2008). Conversely,
35
36 nonexperts will find it more difficult to mentally construct future travel images.
37
38
39
40

41
42 This idea is also held by Suddendorf and Corballis (2007), who argue that MTT requires a
43
44 constellation of skills and not simply an isolated capacity. MTT may involve a suite of
45
46 cognitive abilities (e.g., imagination, self-recognition, semantic memory, recursive thought,
47
48 representational theory of mind), and failures in any of these may lead to no anticipation. If a
49
50 component is only weakly present, if at all, MTT will be severely limited. For instance,
51
52 young children may fail to imagine a particular future event because one or several of these
53
54 components is not yet fully developed. For this reason, tourists will need to develop
55
56 mechanisms that make it possible to predict future situations, such as memory, associations,
57
58
59
60
61
62
63
64
65

1 information processing, and being able to combine and recombine existing elements in the
2 mind. All of these skills represent the dimensions of expertise. Therefore, we suggest the
3 following:
4
5

6
7
8 H1c. A tourist's expertise will directly and positively affect their mental time travel.
9

10 11 **3.2. Effect of travel organization on information seeking** 12

13
14
15 Previous research has shown that searching for destination-related information and the travel
16 planning process are closely interrelated (Choi et al., 2012; Fodness & Murray, 1998).
17

18 Organizing a trip is, in fact, an integrative activity that involves searching for information
19 before, during and after drafting a plan (Fesenmaier & Jeng, 2000; Jun, Vogt, & MacKay,
20 2007). Similarly, the growing travel and tourism research literature on information
21 technology shows that tools like search engines and social media are becoming a dominant
22 force that influences travelers' behaviors in the travel planning context (Ayeh, Au, & Law,
23 2013; Huang et al., 2017; Xiang, Magnini, & Fesenmaier, 2015). Several variables such as
24 individual differences, tourist motivations, and time spent in planning may influence the
25 information seeking behavior of consumers (Kerstetter & Cho, 2004). This paper suggests
26 that the amount of external information will vary depending on the degree to which the
27 consumer is concerned and participates in the travel organization process.
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44

45 Specifically, we propose that tourists who decide to organize a significant part of their future
46 trip will necessarily spend more time seeking information compared to those who rely on
47 others to arrange the whole trip for them (Berger & Dibattista, 1992; Mumford et al., 2001).
48
49

50 This means that when a tourist plans a trip on their own, they should consider a large number
51 of details before traveling and adapt them: transportation to the final destination,
52 accommodation, restaurants, moving around the destination, places to visit, etc. Travel
53 organization requires taking into account and coordinating all these aspects. To do so, it is
54
55
56
57
58
59
60
61
62
63
64
65

1 necessary to search for information about distances, services, prices, local customs, weather,
2 and more. Therefore, the following is expected:
3
4

5 H2. A tourist's level of participation in organizing their travel will directly and positively
6 affect their level of information seeking.
7
8
9

10 **3.3. Effects of travel organization and information seeking on mental time travel**

11 Previous literature suggests that consumers' behavior before traveling may have an effect on
12 MTT, as the latter is extremely sensitive to prior events, images, thoughts, ideas, and feelings
13 (Berntsen & Jacobsen, 2008; San Martín & Rodriguez del Bosque, 2008). Drawing on these
14 insights, we argue that higher levels of travel organization and information seeking will
15 promote the generation of images of the experience in a tourist's mind, instilling tourists with
16 a more intense mental connection with the travel experience, which leads to a less diffused
17 and more complete view of the upcoming event. When individuals search for information and
18 opinions about a destination, they are collecting a large amount of images that can be applied
19 in building an imagined future event, which is predominantly visual (Berntsen & Jacobsen,
20 2008; Frías et al., 2008). For instance, a picture showing views of a hotel, or a photo of the
21 room may lead a tourist to choose a specific accommodation, and those images will appear in
22 their mind many times before they get there. Conversely, for those individuals who have low
23 participation in organizing travel details, it will be more difficult to mentally construct future
24 travel episodes and scenarios. Jointly considered, the above comments suggest that a positive
25 link can be established between task-related co-creation processes (travel organization and
26 information seeking) and mind-related co-creation processes (MTT).
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54

55 H3. A tourist's level of participation in organizing their travel will directly and positively
56 affect their mental time travel.
57
58
59
60
61
62
63
64
65

1 H4. A tourist's level of information seeking will directly and positively affect their mental
2 time travel.
3
4

5 **3.4. Control variables**

6
7
8
9 The model includes two variables that could affect information seeking, travel organization,
10 and MTT: social capital and involvement.
11
12

13
14
15 The first control variable is social capital. There is an entire stream of literature on tourism
16 examining the impact of peer-to-peer influence, online reviews, and word of mouth on travel
17 booking and consumption (Gretzel & Yoo, 2008; Sparks & Browning, 2011; Zhang, Ito, &
18 Lin, 2018). This literature consistently suggests that tourists' decisions and behaviors are
19 affected by their social context and that consumers prefer family and friends as information
20 sources, as information coming from these sources is perceived as disinterested, reliable, and
21 empathetic. Social capital could supplement, at least partially, the knowledge and confidence
22 that nonexperts lack by providing supportive information, solutions, and validation (Barrutia
23 & Gilsanz, 2013; Gretzel & Yoo, 2008). Therefore, we control for a possible effect of social
24 capital on information seeking.
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39

40 The second control variable is tourist involvement. Involvement has consistently been viewed
41 as a precursor of human and consumer behavior, such as search types, forms of information
42 processing, and decision-making (Laurent & Kapferer, 1985). Regarding tourism, Gursoy and
43 McCleary (2004) argue that a search is likely to be directly influenced by the level of
44 involvement required. Similarly, customer involvement was suggested as influencing
45 anticipated consumer effort (Clarke & Belk, 1979), such as spending time and energy in
46 organizing a trip yourself. All in all, several authors support the idea that highly involved
47 individuals go through extended problem-solving processes that include recognizing the
48 problem, actively searching for information, and evaluating the alternatives (Beatty & Smith,
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65

1987; Havitz & Dimanche, 1999; Jamrozy, Backman, & Backman, 1996; Lehto, Kim, & Morrison, 2006). Accordingly, we control for the possible effect of involvement on the three co-creation processes considered.

4. Research methodology

We conducted a survey of French and Spanish travelers who had already planned a leisure trip abroad. Participants had to answer issues about their travel-related resources and their specific co-creation processes in relation to a forthcoming trip. We launched the questionnaire in two different periods: Easter and summer holidays. The whole data-collection process took less than three months, from April to June 2017.

We obtained data from online panels in the two countries. Participants were sent an e-mail with a link to the research questionnaire, and they received a small incentive for participating. We opted for this method to ensure response quality.

The response rate was 5-6% for Easter and 11-12% in the summer. A total of 1,561 questionnaires were collected, and the data mining process, which consisted of eliminating problematic questionnaires (e.g., those that were answered too quickly), produced 984 usable responses (63% of the initial sample). Table 1 presents the sample profile. The respondents were 46% male and 54% female. They were predominately young (61% were under 45) or middle-aged (20%). Most respondents were educated to degree level or above (58%) or had received vocational training (23%), and were predominantly employees (65%). The majority of respondents stated that they had an income of about average (36%) or higher than average (36%). Regarding their planned trip, most of the respondents were going on a cultural (36%) or urban trip (38%) for less than a week (64%). The majority were traveling as a couple (46%) or with their family (33%) or friends (15%). For most of them, this was the first (55%) or second (27%) time they had been to the destination.

Table 1. Sample profile: demographic information and travel characteristics ($n=984$)

| Demographic information | | | Characteristics of the trip | | |
|---------------------------------|-----|-----|---------------------------------------|-----|-----|
| | n | % | | n | % |
| Gender | | | Type of travel | | |
| Male | 448 | 46% | Cultural | 357 | 36% |
| Female | 536 | 54% | Urban (city) | 372 | 38% |
| Nationality | | | Beach vacations | 150 | 15% |
| French | 480 | 51% | Adventure | 32 | 3% |
| Spanish | 504 | 49% | Rural/Nature | 36 | 4% |
| Age | | | Other | 37 | 4% |
| 18 to 24 | 102 | 10% | Estimated duration of the trip | | |
| 25 to 34 | 232 | 24% | Less than 3 days | 71 | 7% |
| 35 to 44 | 267 | 27% | 3-7 days | 556 | 57% |
| 45 to 54 | 200 | 20% | 8-14 days | 270 | 27% |
| 55 to 64 | 111 | 11% | More than 2 weeks | 87 | 9% |
| 65 and over | 72 | 7% | Travel group | | |
| Education | | | Alone | 62 | 6% |
| Primary education | 8 | 1% | Couple | 452 | 46% |
| Secondary education | 184 | 19% | Family | 322 | 33% |
| Vocational training | 225 | 23% | Friends | 145 | 15% |
| Bachelor's degree | 430 | 44% | Other | 3 | 0% |
| Master or Doctorate | 137 | 14% | Previous visits | | |
| Occupation | | | No previous visits | 544 | 55% |
| Student | 90 | 9% | Once | 265 | 27% |
| Self-employed | 64 | 7% | 2-3 times | 88 | 9% |
| Employee | 640 | 65% | More than 3 times | 87 | 9% |
| Unemployed | 53 | 5% | | | |
| Housewife/husband | 34 | 3% | | | |
| Retired | 103 | 10% | | | |
| Annual net family income | | | | | |
| Less than €12,500 | 98 | 10% | | | |
| €12,500-20,000 | 171 | 17% | | | |
| €20,001-35,000* | 359 | 36% | | | |
| €35,001-60,000 | 276 | 28% | | | |
| More than €60,000 | 80 | 8% | | | |

Note: Includes average salary in France and Spain in 2017.

A potential concern in this research was the possible effect of common method variance. As a result, several precautions were taken to control common method bias: the scale was improved as much as possible with regard to vocabulary and length (Tourangeau, Rips, & Rasinski, 2000); the data collection method (online panel) reduced evaluation apprehension; the order of the questions was counterbalanced by providing two different models of the questionnaire (Podsakoff et al., 2003) (the impact of the question order on responses was not significant: $\chi^2 = .620 < \chi^2_{.05}(30) = 43.773$); and the post hoc Harman's one-factor test was applied, which revealed unsatisfactory values for the single-factor model, with very low

model fits ($\chi^2 = 12624.369$; $df = 465$; $CFI = .544$; $TLI = .521$; $RMSEA = .113$; $SRMR = .244$).

In order to measure model variables, we used established scales when possible. Specific scale wordings are provided in Table 2. Regarding expertise, the proposition introduced by Alba and Hutchinson (1987) and operationalized by Kleiser and Mantel (1994) was adapted to the tourism context, encompassing four factors: cognitive effort, analysis, elaboration, and memory. Each factor was measured with three items based on prior research (Gursoy & McCleary, 2004; Teichmann, 2011). Travel organization was addressed using a scale of degree of co-creation (Grissemann & Stokburger Sauer, 2012), which was completed with two additional items derived from Victorino et al. (2005) and Mohd-Any, Winklhofer, and Ennew (2015). Information seeking was adapted to tourism from Yi and Gong (2013). The lack of antecedents on mental co-creation processes led to a self-developed scale to measure MTT. Four items were established using conceptual ideas. Tourist social capital was measured by adapting the scale proposed by Barrutia and Gilsanz (2013) to the tourism environment. Tourist involvement was measured by adapting three items from Gursoy and Gavcar (2003).

All items were assessed using a ten-point Likert scale from 0 = “totally disagree” to 10 = “totally agree.” A pre-test with 14 people was launched in order to evaluate the whole questionnaire. Changes were consequently made to the wording, and the questionnaires were finally translated into French and Spanish to fit the target population.

Table 2. Unidimensionality, convergent validity, and reliability assessment

| Construct and item | Standardized loading | CR | AVE |
|--|----------------------|------|------|
| Cognitive effort | | .873 | .697 |
| I can easily differentiate vacation destinations based on the attractions offered (destinations, accommodation, transportation, etc.). | .844*** | | |
| If I am given a list of vacation services (destinations, accommodations, | .819*** | | |

| | | | | |
|----|--|---------|------|------|
| 1 | transportation, etc.), I can easily group those services that offer similar attractions. | | | |
| 2 | I can easily understand everything that is related to travel. | .841*** | | |
| 3 | Analysis | | .799 | .665 |
| 4 | I enjoy learning about vacations. | .801*** | | |
| 5 | I search for the latest useful information to organize a trip. | Deleted | | |
| 6 | I keep up to date on what is related to travel destinations and services. | .830*** | | |
| 7 | Elaboration | | .871 | .771 |
| 8 | I consider myself knowledgeable on organizing vacations. | Deleted | | |
| 9 | My knowledge on travel organization helps me to understand information about the services offered. | .877*** | | |
| 10 | I use my knowledge on travel organization to make the best decisions when booking vacations (choose destination, accommodation, transportation, etc.). | .879*** | | |
| 11 | Memory | | .857 | .668 |
| 12 | I can easily remember travel-related issues. | .860*** | | |
| 13 | I can remember almost all the existing brands booked for my trips (hotels, airlines, etc.). | .725*** | | |
| 14 | I remember different aspects about my vacations. | .859*** | | |
| 15 | Travel organization (ORG) | | .869 | .625 |
| 16 | I have been actively involved in the packaging of my trip. | .745*** | | |
| 17 | I have used my experience from previous trips in order to arrange this trip. | Deleted | | |
| 18 | The ideas on how to arrange this trip were predominantly suggested by myself. | Deleted | | |
| 19 | I have spent a considerable amount of time arranging this trip. | .809*** | | |
| 20 | I have planned my trip based on my own needs and wants. | .847*** | | |
| 21 | I have been interested in the details of the trip. | .757*** | | |
| 22 | Information seeking (INF) | | .825 | .703 |
| 23 | I have asked others for information about my destination and services available there. | .810*** | | |
| 24 | I have searched for information about my forthcoming trip. | .866*** | | |
| 25 | I have paid attention to what others think about my travel. | Deleted | | |
| 26 | Mental time travel (MTT) | | .826 | .613 |
| 27 | I have thought about my forthcoming trip. | .825*** | | |
| 28 | I have talked about my forthcoming trip. | .709*** | | |
| 29 | I have imagined my forthcoming experience. | .810*** | | |
| 30 | I have gotten away from my daily routine by thinking about my forthcoming trip. | Deleted | | |
| 31 | Expertise (EXP) | | .925 | .755 |
| 32 | Second-order construct made up of cognitive effort, analysis, elaboration, and memory (reflective). | | | |
| 33 | Cognitive effort | .907*** | | |
| 34 | Analysis | .804*** | | |
| 35 | Elaboration | .897*** | | |
| 36 | Memory | .864*** | | |
| 37 | Control variables | | | |
| 38 | Social capital | | .852 | .659 |
| 39 | People around me know a lot about travel organization. | .825*** | | |
| 40 | I get useful information about trips from colleagues and friends. | .849*** | | |
| 41 | I usually speak to colleagues and friends about travel-related issues. | .758*** | | |
| 42 | Involvement | | .888 | .726 |
| 43 | I attach great importance to a vacation. | .869*** | | |
| 44 | A vacation is a pleasure for me. | .888*** | | |
| 45 | I can say that vacation destinations interest me a lot. | .797*** | | |

Model fit indices (Robust): $\chi^2 = 9540.377$; $df = 300$; $CFI = .954$; $TLI = .943$; $RMSEA = .042$; $SRMR = .039$.

Note: AVE = average extracted variance; CR = composite reliability; CFI = comparative fit index; TLI = Tucker-Lewis index; RMSEA = root mean square error of approximation; SRMR = standardized root mean square residual.

* $p < .1$; ** $p < .05$; *** $p < .01$

5. Results

Data analysis, which was performed with the Mplus software, used a two-step approach (Fornell & Larcker, 1981; Hair et al., 2010). The first step involved analyzing the measurement model to test the convergent and discriminant validity of the measurements.

After proving the suitability of the measurements, the structural relationships between latent variables were estimated.

Confirmatory factor analysis (CFA) was applied to assess the convergent and discriminant validity. The convergent validity of the scales is usually verified by using three criteria suggested by Fornell and Larcker (1981):

- 1) all indicator loadings should exceed .70;
- 2) variable reliabilities should exceed .80; and
- 3) the average variance extracted (AVE) of each variable should exceed the variance due to measurement error for that variable (i.e., AVE should exceed .50).

To meet the first requirement, we identified six indicators that were under the .70 cut-off value and deleted them. After removing these items, the results of the CFA confirmed the convergent validity of the data (see Table 2). The goodness of fit of the overall model indicated a reasonable fit to the data, with $\chi^2_{(300)} = 9540.377$; CFI = .954; TLI = .943; RMSEA = .042; and SRMR = .039.

Discriminant validity was tested using the correlation matrix, where the correlation factors for construct pairs were shown to be lower than the AVE for each variable, except for a pair of variables (*in italics*) that refer to the tourist expertise construct (see Table 3), which

yielded similar results in previous research (e.g., Barrutia & Gilsanz, 2013). Two additional tests, confidence interval and Wald test, were carried out on these problematic factors (cognitive effort and elaboration). Further evidence showed that there was no perfect correlation between these two dimensions.

Table 3. Correlation matrix for discriminant validity

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| 1. Cognitive effort | .835 | | | | | | | | |
| 2. Analysis | .662 | .816 | | | | | | | |
| 3. Elaboration | .852 | .767 | .878 | | | | | | |
| 4. Memory | .789 | .653 | .751 | .817 | | | | | |
| 5. Travel organization | .669 | .678 | .679 | .649 | .791 | | | | |
| 6. Information seeking | .216 | .500 | .300 | .288 | .466 | .839 | | | |
| 7. Mental time travel | .673 | .648 | .580 | .669 | .388 | .638 | .783 | | |
| 8. Social capital | .381 | .493 | .460 | .389 | .339 | .466 | .388 | .812 | |
| 9. Involvement | .644 | .548 | .532 | .701 | .605 | .306 | .638 | .280 | .852 |

Note: Correlations between construct pairs are shown below the diagonal. The square root of the AVE for each construct is shown on the diagonal.

In the second step, the significance of the relationships between the constructs in the model was tested by structural equation modeling. Results of the overall model are presented in Table 4, which shows that, with the exception of one hypothesis, all the proposed structural relationships between variables are supported.

Table 4. Structural model estimations and hypothesis testing

| | Estimate | Est./SE | p value | Hypothesis testing |
|------------------------------------|----------|---------|---------|--------------------|
| Hypotheses (direct effects) | | | | |
| H1a. EXP → ORG | .657*** | 13.222 | .000 | Supported |
| H1b. EXP → INF | -.165* | -1.724 | .085 | Not supported |
| H1c. EXP → MTT | .334*** | 3.596 | .000 | Supported |
| H2. ORG → INF | .292*** | 3.341 | .001 | Supported |
| H3. ORG → MTT | .270*** | 2.890 | .004 | Supported |
| H4. INF → MTT | .168*** | 3.464 | .001 | Supported |
| Social capital → INF | .411*** | 8.280 | .000 | - |
| Involvement → ORG | .149*** | 2.890 | .004 | - |
| Involvement → INF | .132** | 2.537 | .011 | - |
| Involvement → MTT | .190*** | 3.595 | .000 | - |
| Total indirect effects | | | | |
| EXP → INF (mediated by ORG) | .192*** | 3.127 | .002 | n.a. |
| EXP → MTT (mediated by ORG, INF) | .182*** | 2.891 | .004 | n.a. |
| ORG → MTT (mediated by INF) | .049** | 2.440 | .015 | n.a. |

| | | | | |
|---|---|-------|------|------|
| Involvement → INF (mediated by ORG) | .043** | 2.494 | .013 | n.a. |
| Involvement → MTT (mediated by ORG and INF) | .069*** | 2.887 | .004 | n.a. |
| Fit indexes (robust) | $\chi^2=9540.377$; $df=300$; $p\text{-value}=0.0000$; $CFI=.937$; $TLI=.927$; $RMSEA=.048$; $SRMR=.048$ | | | |

Note: Est. = estimate; SE = standard error; n.s. = not significant; n.a. = not available; d.f. = degrees of freedom; CFI = comparative fit index; TLI = Tucker-Lewis index; RMSEA = root mean square error of approximation; SRMR = standardized root mean square residual.

* $p < .1$; ** $p < .05$; *** $p < .01$

Hypothesis testing reveals that H1a and H1c are accepted, as tourist expertise is shown to positively affect travel organization and MTT ($\beta_{1a} = .657$ and $\beta_{1c} = .334$, $p < 0.01$) (supported). On the other hand, although the proposed link between tourist expertise and information seeking (H1b) is not supported, it has the expected sign (negative) and is marginally significant ($\beta_{1b} = -.165$, $p = .085 < 0.10$).

All the relationships established between the different co-creation processes of the tourists were supported. Firstly, travel organization positively affects information seeking (H2: $\beta_2 = .292$, $p < 0.01$). In turn, both travel organization and information seeking positively affect MTT (H3 and H4: $\beta_3 = .270$ and $\beta_4 = .168$ respectively, $p < 0.01$).

Social capital and involvement were shown to have a positive effect on pre-travel tourism experience co-creation processes, although the effect was, in general, weaker than that of consumer expertise.

6. Discussion

This study provides an in-depth contribution regarding the participation of tourists in value co-creation processes during the pre-travel stage of the tourism experience. The conceptual model, based on S-D logic, proposes that tourist expertise (knowledge and skills) is a necessary resource to co-create value through task-related (travel organization and

1 information seeking) and mind-related processes (MTT). This approach brings several
2 theoretical contributions to tourism and service literature.
3

4
5 Firstly, while previous studies have extensively examined the pre-trip stage from a
6 motivational perspective, the role of the consumer as co-creator of value at this stage has
7 been little studied (Creevey, Kidney, & Mehta, 2019). Our approach differs from previous
8 tourism literature in this aspect, making it possible to identify new value drivers. Secondly,
9 the co-creation model proposed in this paper is based on S-D logic, which is a well-
10 established and highly echoed co-creation logic, aspiring to serve as a foundation for a
11 general theory of marketing and a theory of the market (Vargo & Lusch, 2016). In contrast to
12 many prior studies on co-creation that lack robust underpinnings by relying on a fragmented
13 body of knowledge (Phi & Dredge, 2019), our proposition provides a systematic and
14 comprehensive understanding of value co-creation in the tourism context. Our proposal
15 covers some of the essential elements of co-creation of value described by S-D logic, namely
16 knowledge and skills (expertise), resource integration (physical and cognitive processes), and
17 a systemic view (customer, provider, and other actors, included in this research in the form of
18 social capital), where the customer plays an indispensable role.
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40

41 Thirdly, the inclusion of mental co-creation is a key contribution to the paper. Previous
42 research has focused on value co-creation processes that are task-related (Dekhili & Hallem,
43 2020; Deng et al., 2020; Lei et al., 2020), leaving non-interactional, mental processes aside.
44 This paper is intended to cover this gap by making the mental co-creation concept concrete
45 and operative, in the form of MTT. MTT generates value for the customer with no significant
46 additional costs for either the company or the tourist, leading to a win-win situation. This
47 form of value co-creation is, then, particularly interesting for tourism service providers. By
48 taking a step toward exploring this omission, this study emphasizes MTT and studies its
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65

1 drivers. Finally, we provide an expertise-leading value co-creation model that may well be
2 applied in other experiential contexts.
3

4
5 From an empirical contribution perspective, our findings show that, overall, tourist resources,
6 and particularly tourist expertise, positively affect pre-travel co-creation processes. This
7 confirms the resource-based view of S-D logic, in that more and better resources increase the
8 co-creative capacity of tourists, leading them to a higher and more active mental and physical
9 participation in the pre-trip co-creation processes. Corroborating the conceptual development
10 of S-D logic, in which particular emphasis is placed on knowledge and skills, we find that
11 tourist expertise prevails as the most important resource in the pre-travel stage, above social
12 capital and involvement, included in the model as control variables. This is also important
13 because S-D logic is mostly based on conceptual developments, while cross-sectional studies
14 that confirm or disconfirm its assumptions are scarce (e.g., Barrutia & Gilsanz, 2013).
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30

31 More specifically, this study shows that expert tourists tend to organize their trips themselves.
32 As has been also suggested in previous studies (e.g., Auh et al., 2007), this result is explained
33 by the fact that experts are more efficient and effective when organizing their own trips. They
34 are better equipped to assess where they can make a contribution (e.g., identifying bargains,
35 booking tickets online, planning made-to-measure trips), evaluate the attributes of different
36 offerings (e.g., being able to recognize reasonable prices for hotels and flights, knowing if
37 certain destinations meet their travel objectives), and perceive lower decision-making risk
38 (due to previous successful experiences). The greater involvement of experts in organizing
39 their own trips leads them to search for more information. As explained by Steinbauer and
40 Werthner (2007), this happens because information is a crucial factor for tourists when
41 organizing their vacations. When individuals are actively involved in their vacation planning,
42 they usually try to adapt vacations to their needs and wants, which leads to searching for
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65

1 more information about the specific destination with the aim of designing their itinerary.
2 Experts are, therefore, willing to assume searching costs for optimizing their travel
3 organization (positive indirect effect). While own knowledge could reduce the need to search
4 for information (as shown by the marginally significant negative direct effect of expertise on
5 information seeking), more involvement in organizing a trip leads to experts devoting more
6 time and energy to searching for information. This result is consistent with studies that echo
7 the increasing effort of tourism service providers to facilitate information seeking. This is
8 exemplified by e-tourism, which relies on information technology as a recommendation and
9 planning assistant for tourists in order to organize a leisure agenda through multiple-source
10 data at the different stages of travel planning (Sebastia et al., 2009; Xiang et al., 2015). Our
11 findings in this part of the research contribute to the broad and controversial literature on the
12 link between expertise and information seeking (Kerstetter & Cho, 2004).
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29

30 We also found a positive and significant link between tourist expertise and MTT. This result
31 confirmed our literature-driven hypothesis: expert tourists possess more powerful travel-
32 related mental structures, which enable an easier and less diffuse projection of disperse pieces
33 of information while imagining a future trip and enjoying what they expect to occur in the
34 future. Interestingly, travelers who spend more time planning and searching for information
35 about their future trip think about it more vividly compared to those participating in a passive
36 way, because their contact with the thought in focus (i.e., the future trip) is continuous, as is
37 the emotional attachment. In line with this result, Kastenholz et al. (2012) referred to
38 affective destination image as involving large doses of imagination and fantasy as well as
39 anticipatory feelings. Such feelings, particularly those associated with vivid imagery, are part
40 of the pre-experience and determine the way the trip is actually experienced (value) as well as
41 subsequent memories.
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65

7. Managerial implications

Tourism service providers face an increasingly competitive context in which consumers co-create and determine value and make decisions accordingly. Marginal differences in the value proposition of providers may be crucial to tourists' decisions, and explain the success or failure of providers. In this context, any window of opportunity to co-create value with tourists needs to be exploited.

This research offers tourism service providers a systematic view of value co-creation in the pre-travel stage so that they may identify drivers of the value perceived by tourists. Tourism-related firms and public organizations have focused on the on-site travel stage and may not be completely aware of the full potential of the pre-travel stage in creating value for tourists.

Our research shows that tourists may co-create a precious value during the pre-travel stage. This is important for service providers because it increases the tourists' perceived value of the whole experience with a rather low cost for firms. While it is crucial to ensure service quality at the destination and it is undeniable that firms should optimize the on-site stage, it should also be acknowledged that these endeavors are actually more expensive. We propose that paying attention to value co-creation throughout the entire pre-travel stage may be a suitable strategy to achieve value-improvement goals in a more distinctive (i.e., competitors focus on service at the destination) and efficient (i.e., at low cost) way. For that reason, tourism providers and public organizations should adopt a co-creation mindset in their objectives and strategies, acknowledging their role as resource contributors and paying more attention to engaging tourists' value-generating processes during the pre-travel stage.

This study provides a framework wherein tourists are involved in travel organization and information seeking before traveling. Participation in both co-creation processes leads to enjoyment while the customer imagines the experience before going on a vacation, which is a

1 mental and emotional process that allows for anticipation of the future event. This mind-
2 related process is thought to bring value for the tourist *per se*. Besides, organizing the trip and
3 seeking information can make MTT more realistic, ensuring that travelers avoid expectations
4 that are not met on-site. Task-related processes (travel organization and information seeking)
5 bring both costs (in the form of time and energy) and benefits (in the form of better prices and
6 personalization of the experience) to customers. While companies save costs (e.g., they do
7 not pay intermediaries, considering consumers as part-time employees), they need to reduce
8 prices and invest in the service quality of their electronic commerce platforms. By contrast,
9 during MTT, the customer may perceive value without too much sacrifice for providers and
10 tourists.
11

12 These ideas suggest three specific managerial implications. Firstly, it is important for
13 providers to implement and improve how they use technology in order to encourage and
14 make travel organization easier. This might be achieved by providing real-time, convenient,
15 enjoyable, and time-saving relationships through efficient and effective platforms. Secondly,
16 information quality and quantity should be improved and tailored to satisfy the needs of
17 travelers when they are planning a trip. The communication strategies of providers could
18 focus on supporting customer learning. Thirdly, companies can facilitate tourists' MTT by
19 using evocative images and suggestive pleasurable experiences, based on experiential
20 communication campaigns and imagination-inspiring speeches. This might be achieved with
21 virtual reality, where the consumer is able to visit accommodations, restaurants, museums,
22 and stores.
23

24 Results also show that expertise allows tourists to organize their travel more actively and
25 searching for information in that planning process, and stimulates MTT. This means that
26 expert tourists co-create their pre-travel experiences more intensely compared to those with
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65

1 less knowledge and fewer skills regarding traveling issues. For that reason, companies should
2 conceive alternative approaches to increase tourists' knowledge, cultivating consumers' skills
3 and interest in tourism.
4
5

6
7
8 Thus, it can be concluded that an education-based management strategy (Orams, 1996) is also
9 useful before traveling, as it increases physical and mental involvement of future visitors. As
10 they do with their employees, firms should educate their customers to raise the value that is
11 intensively co-created by customers. Educating consumers may consist of devising highly
12 informative communication strategies and websites that allow easy access to a great amount
13 of information, including destination-related information, which will encourage mental
14 stimulation and entertainment (Kohler et al., 2011). Companies should be creative in
15 searching for ways to educate their customers. An example of one way of striving to achieve
16 this goal would be gamified mobile applications, which tell future tourists stories about
17 destinations or encourage them to play, so that they can get to know the place better, thereby
18 enriching their experiences before they travel.
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33

34 35 36 **8. Limitations and future research**

37
38
39 This research is not without limitations. This study was conducted in a specific context
40 (France and Spain) and used a specific method, which involved certain constraints. Further
41 studies conducted in other settings may shed light on the generalizability of our results.
42
43

44 Although causal relationships have been proposed in this study, the cross-sectional nature of
45 our design prevents testing the direction of relationships. While we have rooted our
46 arguments in an in-depth knowledge of our context, existing theory, and past findings, we are
47 aware that our proposals are open to debate.
48
49
50
51
52
53
54
55
56

57 Despite the above limitations, this research provides a first systematic understanding of the
58 pre-travel phase from a value co-creation perspective. It overcomes the usual assimilation of
59
60
61
62
63
64
65

1 co-creation with tasks and offers new avenues and perspectives to researchers and
2 practitioners. Further research could examine the role of other variables in pre-travel value
3 co-creation. For instance, future studies could analyze the role of technology, both as an
4 additional tourist resource and as a moderator in the relationship between resources and co-
5 creation processes. Further investigations could also consider co-creation processes during
6 and after travel.
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65

References

- 1
2
3 Aho, S. K. (2001). Towards a general theory of touristic experiences: Modelling experience
4 process in tourism. *Tourism Review*, 56(3–4), 33–37.
- 5 Ainslie, G. (2007). Foresight has to pay off in the present moment. *Behavioral and Brain*
6 *Sciences*, 30, 299-351.
- 7
8 Alba, J. W., & Hutchinson, J. W. (1987). Dimensions of consumer expertise. *Journal of*
9 *Consumer Research*, 13(4), 411-454.
- 10
11 Alves, H., Ferreira, J. J., & Fernandes, C. I. (2016). Customer's operant resources affects on
12 co-creation activities. *Journal of Innovation & Knowledge*, 1(2), 69-80.
- 13
14 Arnould, E. J., & Thompson, C. J. (2005). Consumer culture theory (CCT): Twenty years of
15 research. *Journal of Consumer Research*, 31(4), 868-882.
- 16
17 Arnould, E. J., Price, L. L., & Malshe, A. (2006). Toward a cultural resource-based theory of
18 the customer. In R. F. Lusch, & S. L. Vargo (Eds.), *The New Dominant Logic in*
19 *Marketing* (pp. 91-104). Armonk, NY: M. E. Sharpe.
- 20
21 Assiouras, I., Skourtis, G., Giannopoulos, A., Buhalis, D., & Koniordos, M. (2019). Value
22 co-creation and customer citizenship behavior. *Annals of Tourism Research*, 78, 102742.
23 <https://doi.org/10.1016/j.annals.2019.102742>.
- 24
25 Auh, S., Bell, S. J., McLeod, C. S., & Shih, E. (2007). Co-production and customer loyalty in
26 financial services. *Journal of Retailing*, 83(3), 359-370.
- 27
28 Ayeh, J. K., Au, N., & Law, R. (2013). Predicting the intention to use consumer-generated
29 media for travel planning. *Tourism Management*, 35, 132-143.
- 30
31 Baron, S., & Harris, K. (2008). Consumers as resource integrators. *Journal of Marketing*
32 *Management*, 24(1-2), 113-130.
- 33
34 Barrutia, J. M., & Gilsanz, A. (2013). Electronic service quality and value. *Journal of Service*
35 *Research*, 16(2), 231–246.
- 36
37 Beatty, S. E., & Smith, S. M. (1987). External search effort: An investigation across several
38 product categories. *Journal of Consumer Research*, 14(1), 83-95.
- 39
40 Berger, C. R., & Dibattista, P. (1992). Information seeking and plan elaboration: What do
41 you need to know to know what to do? *Communications Monographs*, 59(4), 368-387.
- 42
43 Berntsen, D., & Jacobsen, A. S. (2008). Involuntary (spontaneous) mental time travel into the
44 past and future. *Consciousness and Cognition*, 17, 1093-1104.
- 45
46 Bertella, G. (2014). The co-creation of animal-based tourism experience. *Tourism Recreation*
47 *Research*, 39(1), 115–125.
- 48
49 Bettman, J. R. (1979). *An information processing theory of consumer behavior*. Reading,
50 MA: Addison-Wesley.
- 51
52 Bettman, J. R. (1986). Consumer psychology. *Annual Review of Psychology*, 37, 257-289.
- 53
54 Bharti, K., Agrawal, R., & Sharma, V. (2015). Value co-creation: Literature review and
55 proposed conceptual framework. *International Journal of Market Research*, 57(4), 571-
56 603.
- 57
58 Bharwani, S., & Jauhari, V. (2013). An exploratory study of competencies required to co-
59 create memorable customer experiences in the hospitality industry. *International Journal*
60 *of Contemporary Hospitality Management*, 25(6), 823-843.
- 61
62
63
64
65

- 1 Binkhorst, E., & Den Dekker, T. (2009). Agenda for co-creation tourism experience research.
2 *Journal of Hospitality Marketing & Management*, 18(2-3), 311-327.
- 3 Blazquez-Resino, J. J., Molina, A., & Esteban-Talaya, A. (2015). Service-dominant logic in
4 tourism: The way to loyalty. *Current Issues in Tourism*, 18(8), 706-724.
- 5 Boyer, P. (2008). Evolutionary economics of mental time travel? *Trends in Cognitive*
6 *Sciences*, 12(6), 219-224.
- 7 Buhalis, D., & Sinarta, Y. (2019). Real-time co-creation and nowness service: Lessons from
8 tourism and hospitality. *Journal of Travel & Tourism Marketing*, 36(5), 563-582.
- 9 Buonincontri, P., & Micera, R. (2016). The experience co-creation in smart tourism
10 destinations: A multiple case analysis of European destinations. *Information Technology*
11 *& Tourism*, 16(3), 285-315.
- 12 Campos, A. C., Mendes, J., Valle, P. O. D., & Scott, N. (2018). Co-creation of tourist
13 experiences: A literature review. *Current Issues in Tourism*, 21(4), 369-400.
- 14 Chathoth, P., Altinay, L., Harrington, R. J., Okumus, F., & Chan, E. S. W. (2013). Co-
15 production versus co-creation: A process based continuum in the hotel service context.
16 *International Journal of Hospitality Management*, 32, 11-20.
- 17 Choi, S., Lehto, X. Y., Morrison, A. M., & Jang, S. (2012). Structure of travel planning
18 processes and information use patterns. *Journal of Travel Research*, 51(1), 26-40.
- 19 Clarke, K., & Belk, R. W. (1979). The effects of product involvement and task definition on
20 anticipated consumer effort. *Advances in Consumer Research*, 6, 313-318.
- 21 Clawson, M., & Knetsch, J. L. (1966). *Economics of outdoor recreation*. Baltimore, MD:
22 Johns Hopkins.
- 23 Colurcio, M., Caridà, A., & Edvardsson, B. (2017). Conceptualizing resource integration to
24 advance service innovation. In T. Russo-Spena, C. Mele, & M. Nuutinen (Eds.),
25 *Innovating in Practice: Perspectives and Experiences* (pp. 237–259). Cham, Switzerland:
26 Springer International Publishing.
- 27 Constantin, J. A., & Lusch, R. F. (1994). *Understanding resource management*. Oxford, OH:
28 The Planning Forum.
- 29 Cordell, V. V. (1997). Consumer knowledge measures as predictors in product evaluation.
30 *Psychology & Marketing*, 14(3), 241-260.
- 31 Cova, B., & Dalli, D. (2009). Working consumers: The next step in marketing theory?
32 *Marketing Theory*, 9(3), 315-339.
- 33 Cova, B., Dalli, D., & Zwick, D. (2011). Critical perspectives on consumers' role as
34 'producers': Broadening the debate on value co-creation in marketing processes.
35 *Marketing Theory*, 11(3), 231-241.
- 36 Creevey, D., Kidney, E., & Mehta, G. (2019). From dreaming to believing: A review of
37 consumer engagement behaviours with brands' social media content across the holiday
38 travel process. *Journal of Travel & Tourism Marketing*, 36(6), 679-691.
- 39 Cross, R., Rice, R. E., & Parker, A. (2001). Information seeking in social context: Structural
40 influences and receipt of information benefits. *IEEE Transactions on Systems, Man, and*
41 *Cybernetics-Part C: Applications and Reviews*, 31(4), 438-448.
- 42 Dann, G. M. S. (1996). Tourists' images of a destination –An alternative analysis. *Journal of*
43 *Travel and Tourism Marketing*, 5(1/2), 41-55.

- 1 Debus, D. (2014). 'Mental time travel': Remembering the past, imagining the future, and the
2 particularity of events. *Review of Philosophy and Psychology*, 5(3), 333-350.
- 3 Dekhili, S., & Hallem, Y. (2020). An examination of the relationship between co-creation
4 and well-being: An application in the case of tourism. *Journal of Travel & Tourism*
5 *Marketing*, 37(1), 33-47.
- 6
7 Deng, W., Lu, C., Lin, Y., & Chen, W. (2020). A study on the effect of tourists value co-
8 creation on the perceived value of souvenirs: Mediating role of psychological ownership
9 and authenticity. *Asia Pacific Journal of Tourism Research*, 1-15. Doi:
10 10.1080/10941665.2020.1763411
- 11
12 Eletxigerra, A., Barrutia, J. M., & Echebarria, C. (2018). Place marketing examined through a
13 service-dominant logic lens: A review. *Journal of Destination Marketing & Management*,
14 9, 72-84.
- 15
16 Engel, J., Blackwell, R., & Miniard, P. (1995). *Consumer Behavior*. (8th ed.). Fort Worth,
17 TX: Dryden.
- 18
19 Etgar, M. (2008). A descriptive model of the consumer co-production process. *Journal of the*
20 *Academy of Marketing Science*, 36(1), 97-108.
- 21
22 Evans, N. G. (2016). Sustainable competitive advantage in tourism organizations: A strategic
23 model applying service dominant logic and tourism's defining characteristics. *Tourism*
24 *Management Perspectives* 18, 14-25.
- 25
26 Fesenmaier, D. R., & Jeng, J. M. (2000). Assessing structure in the pleasure trip planning
27 process. *Tourism analysis*, 5(1), 13-27.
- 28
29 Fesenmaier, D. R., Xiang, Z., Pan, B., & Law, R. (2011). A framework of search engine use
30 for travel planning. *Journal of Travel Research*, 50(6), 587-601.
- 31
32 Fodness, D., & Murray, B. (1999). A model of tourist information search behavior. *Journal*
33 *of Travel Research*, 37(3), 220-230.
- 34
35 Fornell, C., & Larcker D. F. (1981). Evaluating structural equation models with unobservable
36 and measurement error. *Journal of Marketing Research*, 18(1), 39-50.
- 37
38 Frías, D. M., Rodríguez, M. A., & Castañeda, J. A. (2008). Internet vs. travel agencies on
39 pre-visit destination image formation: An information processing view. *Tourism*
40 *Management*, 29(1), 163-179.
- 41
42 Galvagno, M., & Dalli, D. (2014). Theory of value co-creation: A systematic literature
43 review. *Managing Service Quality*, 24(6), 643-683.
- 44
45 Gardiner, S., & Kwek, A. (2017). Chinese participation in adventure tourism: A study of
46 Generation Y international students' Perceptions. *Journal of Travel Research*, 56(4), 496-
47 506.
- 48
49 Gretzel, U., & Yoo, K. H. (2008). Use and impact of online travel reviews. In P. O'Connor,
50 W. Höpken, & U. Gretzel (Eds.), *Information and Communication Technologies in*
51 *Tourism 2008* (pp. 35-46). Wien, Austria: Springer-Verlag.
- 52
53 Grisseemann, U. S., & Stokburger-Sauer, N. E. (2012). Customer co-creation of travel
54 services: The role of company support and customer satisfaction with the co-creation
55 performance. *Tourism Management*, 33(6), 1483-1492.
- 56
57 Grönroos, C. (2008). Service logic revisited: who creates value? And who co-creates?
58 *European Business Review*, 20(4), 298-314.
- 59
60
61
62
63
64
65

- 1 Grönroos, C., & Voima, P. (2013). Critical service logic: Making sense of value creation and
2 co creation. *Journal of the Academy of Marketing Science*, 41(2), 133-150.
- 3 Gummesson, E., & Mele, C. (2010). Marketing as value co-creation through network
4 interaction and resource integration. *Journal of Business Market Management*, 4(4), 181-
5 198.
- 6
- 7 Gursoy, D., & Gavcar, E. (2003). International leisure tourists' involvement profile. *Annals*
8 *of Tourism Research*, 30(4), 906-926.
- 9
- 10 Gursoy, D., & McCleary, K. W. (2004). An integrative model of tourists' information search
11 behavior. *Annals of Tourism Research*, 31(2), 353-373.
- 12
- 13 Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate Data Analysis*.
14 (7th ed.). Upper Saddle River, NJ: Prentice-Hall.
- 15
- 16 Harrison, T., & Waite, K. (2015). Impact of co-production on consumer perception of
17 empowerment. *Service Industries Journal*, 35(10), 502-520.
- 18
- 19 Havitz, M. E., & Dimanche, F. (1999). Leisure involvement revisited: Drive properties and
20 paradoxes. *Journal of Leisure Research*, 31(2), 122-149.
- 21
- 22 Huang, C. D., Goo, J., Nam, K., & Yoo, C. W. (2017). Smart tourism technologies in travel
23 planning: The role of exploration and exploitation. *Information & Management*, 54(6),
24 757-770.
- 25
- 26 Jamrozy, U., Backman, S. J., & Backman, K. F. (1996). Involvement and opinion leadership
27 in tourism. *Annals of Tourism Research*, 23(4), 908-924.
- 28
- 29 Jun, S. H., Vogt, C. A., & MacKay, K. J. (2007). Relationships between travel information
30 search and travel product purchase in pretrip contexts. *Journal of Travel Research*, 45(3),
31 266-274.
- 32
- 33 Kastenholz, E., Carneiro, M. J. A., & Peixeira Marques, C. (2012). Marketing the rural
34 tourism experience. In R. H. Tsiotsou, & R. E. Goldsmith (Eds.), *Strategic Marketing in*
35 *Tourism Services* (pp. 247–264). Bingley, UK: Emerald Group Publishing Limited.
- 36
- 37 Kellogg, D. L., Youngdahl, W. E., & Bowen, D. E. (1997). On the relationship between
38 customer participation and satisfaction: Two frameworks. *International Journal of Service*
39 *Industry*, 8(3), 206-219.
- 40
- 41 Kerstetter, D., & Cho, M. H. (2004). Prior knowledge, credibility and information search.
42 *Annals of Tourism Research*, 31(4), 961-985.
- 43
- 44 Kleiser, S. B., & Mantel, S. P. (1994). The dimensions of consumer expertise: A scale
45 development. In R. Achrol, & A. Mitchell (Eds.), *AMA Educators Proceedings* (Vol. 5)
46 (pp. 20–26). Chicago, IL: American Marketing Association.
- 47
- 48 Kohler, T., Fueller, J., Matzler, K., Stieger, D., & Füller, J. (2011). Co-creation in virtual
49 worlds: The design of the user experience. *MIS quarterly*, 35(3), 773-788.
- 50
- 51 Kreitner, R., & Kinicki, A. (2010). *Organizational behaviour*. (9th ed.). New York, NY:
52 McGraw-Hill.
- 53
- 54 Laurent, G., & Kapferer, J. N. (1985). Measuring consumer involvement profiles. *Journal of*
55 *Marketing Research*, 22(1), 41-53.
- 56
- 57 Lee, W., & Gretzel, U. (2012). Designing persuasive destination websites: A mental imagery
58 processing perspective. *Tourism Management*, 33(5), 1270-1280.
- 59
- 60
- 61
- 62
- 63
- 64
- 65

- 1 Lehto, X. Y., Kim, D.-Y., & Morrison, A. M. (2006). The effect of prior destination
2 experience on online information search behaviour. *Tourism and Hospitality Research*,
3 6(2), 160-178.
- 4 Lei, S. I., Ye, S., Wang, D., & Law, R. (2020). Engaging customers in value co-creation
5 through mobile instant messaging in the tourism and hospitality industry. *Journal of*
6 *Hospitality & Tourism Research*, 44(2), 229-251.
- 7
8 Lin, N. (2008). A network theory of social capital. In D. Castiglione, J. W. Van Deth, & G.
9 Wolleb (Eds.), *The Handbook of Social Capital* (pp. 50–69). Oxford, UK: Oxford
10 University Press.
- 11
12 Litvin, S. W., Goldsmith, R. E., & Pan, B. (2008). Electronic word-of-mouth in hospitality
13 and tourism management. *Tourism Management*, 29(3), 458-468.
- 14
15 Lusch, R. F., & Nambisan, S. (2015). Service innovation: A service-dominant logic
16 perspective. *MIS Quarterly*, 39(1), 155-175.
- 17
18 Lusch, R. F., Vargo, S. L., & O'Brien, M. (2007). Competing through service: Insights from
19 service-dominant logic. *Journal of Retailing*, 83(1), 5-18.
- 20
21 MacInnis, D. J., & Price, L. L. (1987). The role of imagery in information processing:
22 Review and extensions. *Journal of Consumer Research*, 13(March), 473-491.
- 23
24 Maglio, P. P., & Spohrer, J. (2008). Fundamentals of service science. *Journal of the Academy*
25 *of Marketing Science*, 36(1), 18-20.
- 26
27 Malek, H. B., Berna, F., & D'Argembeau, A. (2018). Envisioning the times of future events:
28 The role of personal goals. *Consciousness and Cognition*, 63, 198-205.
- 29
30 Mathisen, L. (2013). Staging natural environments: A performance perspective. *Advances in*
31 *Hospitality and Leisure*, 9, 163–183.
- 32
33 Mohd-Any, A. A., Winklhofer, H., & Ennew, C. (2015). Measuring users' value experience
34 on a travel website (e-value): What value is cocreated by the user? *Journal of Travel*
35 *Research*, 54(4), 496–510.
- 36
37 Montaña, D. E., & Kasprzyk, D. (2015). Theory of reasoned action, theory of planned
38 behavior, and the integrated behavioral model. In K. Glanz, B. K. Rimer, & K. Viswanath
39 (Eds.), *Health Behavior: Theory, Research, and Practice* (5th ed.) (pp. 95-124). San
40 Francisco, CA: Wiley.
- 41
42 Mumford, M. D., Schultz, R. A., & Van Doorn, J. R. (2001). Performance in planning:
43 Processes, requirements, and errors. *Review of General Psychology*, 5(3), 213-240.
- 44
45 Munar, A. M., & Jacobsen, J. K. S. (2014). Motivations for sharing tourism experiences
46 through social media. *Tourism Management*, 43, 46-54.
- 47
48 Nambisan, S., & Baron, R. A. (2009). Virtual customer environments: Testing a model of
49 voluntary participation in value co-creation activities. *Journal of Product Innovation*
50 *Management*, 26(4), 388-406.
- 51
52 Neal, J. D., & Gursoy, D. (2008). A multifaceted analysis of tourism satisfaction. *Journal of*
53 *Travel Research*, 47, 53-62.
- 54
55 Orams, M. B. (1996). A conceptual model of tourist-wildlife interaction: The case for
56 education as a management strategy. *The Australian Geographer*, 27(1), 39-51.
- 57
58 Paredes, M. R., Barrutia, J. M., & Echebarria, C. (2014). Resources for value co-creation in
59 e-commerce: A review. *Electronic Commerce Research*, 14(2), 111-136.
- 60
61
62
63
64
65

- 1 Parrinello, G. L. (1993). Motivation and anticipation in post-industrial tourism. *Annals of*
2 *Tourism Research*, 20(2), 233-249.
- 3 Payne, A. F., Storbacka, K., & Frow, P. (2008). Managing the co-creation of value. *Journal*
4 *of the Academy of Marketing Science*, 36(1), 83–96.
- 5 Phi, G. T., & Dredge, D. (2019). Collaborative tourism-making: An interdisciplinary review
6 of co-creation and a future research agenda. *Tourism Recreation Research*, 44(3), 284-
7 299.
- 8 Plank, A. (2016). The hidden risk in user-generated content: An investigation of ski tourers’
9 revealed risk-taking behavior on an online outdoor sports platform. *Tourism Management*,
10 55, 289-296.
- 11 Podsakoff, P. M., MacKenzie, S. B., Lee, J.-Y., & Podsakoff, N. P. (2003). Common method
12 biases in behavioral research: A critical review of the literature and recommended
13 remedies. *The Journal of Applied Psychology*, 88(5), 879–903.
- 14 Prahalad, C. K., & Ramaswamy, V. (2004). Co-creating unique value with customers.
15 *Strategy & Leadership*, 32(3), 4-9.
- 16 Prayag, G., Gannon, M. J., Muskat, B., & Taheri, B. (2020). A serious leisure perspective of
17 culinary tourism co-creation: The influence of prior knowledge, physical environment and
18 service quality. *International Journal of Contemporary Hospitality Management*.
19 <https://doi.org/10.1108/IJCHM-10-2019-0897>
- 20 Prebensen, N. K., & Xie, J. H. (2017). Efficacy of co-creation and mastering on perceived
21 value and satisfaction in tourists’ consumption. *Tourism Management*, 60, 166-176.
- 22 Prebensen, N. K., Chen, J. S., & Uysal, M. (2018). Co-creation of tourist experience: Scope,
23 definition and structure. In N. K. Prebensen, J. S. Chen, & M. S. Uysal (Eds.), *Creating*
24 *Experience Value in Tourism* (2nd ed.) (pp. 1-10). Wallingford, Oxfordshire: Cabi.
- 25 Prebensen, N. K., Kim, H. L., & Uysal, M. (2016). Cocreation as moderator between the
26 experience value and satisfaction relationship. *Journal of Travel Research*, 55(7), 934-
27 945.
- 28 Prebensen, N. K., Vittersø, J., & Dahl, T. I. (2013). Value co-creation significance of tourist
29 resources. *Annals of Tourism Research*, 42, 240-261.
- 30 Prebensen, N. K., Woo, E., & Uysal, M. S. (2014). Experience value: Antecedents and
31 consequences. *Current Issues in Tourism*, 17(10), 910-928.
- 32 Prebensen, N. K., Woo, E., Chen, J. S., & Uysal, M. (2012). Experience quality in the
33 different phases of a tourist vacation: A case of northern Norway. *Tourism Analysis*, 17(5),
34 617-627.
- 35 Prebensen, N. K., Woo, E., Chen, J. S., & Uysal, M. S. (2013). Motivation and involvement
36 as antecedents of the perceived value of the destination experience. *Journal of Travel*
37 *Research*, 52(2), 253-264.
- 38 Ranjan, K. R., & Read, S. (2016). Value co-creation: Concept and measurement. *Journal of*
39 *the Academy of Marketing Science*, 44(3), 290–315.
- 40 Rhue, J. W., & Lynn, S. J. (1987). Fantasy proneness: The ability to hallucinate “as real as
41 real”. *British Journal of Experimental and Clinical Hypnosis*, 4, 173–180.
- 42 Rihova, I., Buhalis, D., Moital, M., & Gouthro, M. B. (2015). Conceptualising customer-to-
43 customer value co-creation in tourism. *International Journal of Tourism Research*, 17(4),
44 356-363.

- 1 Rothschild, M. L. (1984). Perspectives on involvement: Current problems and future
2 directions. *Advances in Consumer Research*, 11, 216-217.
- 3 San Martín, H., & Rodríguez del Bosque, I. A. (2008). Exploring the cognitive-affective
4 nature of destination image and the role of psychological factors in its formation. *Tourism
5 Management*, 29(2), 263–277.
- 6
7 Sebastia, L., Garcia, I., Onaindia, E., & Guzman, C. (2009). E-tourism: A tourist
8 recommendation and planning application. *International Journal of Artificial Intelligence
9 Tools*, 18(5), 717-738.
- 10
11 Shaw, G., Bailey, A., & Williams, A. (2011). Aspects of service-dominant logic and its
12 implications for tourism management: Examples from the hotel industry. *Tourism
13 Management*, 32(2), 207-214.
- 14
15 Simonson, I., Huber, J., & Payne, J. (1988). The relationship between prior brand knowledge
16 and information acquisition order. *Journal of Consumer Research*, 14, 566-578.
- 17
18 Sparks, B. A., & Browning, V. (2011). The impact of online reviews on hotel booking
19 intentions and perception of trust. *Tourism Management*, 32(6), 1310-1323.
- 20
21 Steinbauer, A., & Werthner, H. (2007). Consumer behaviour in e-tourism. In M. Sigala, L.
22 Mich, & J. Murphy (Eds.), *Information and Communication Technologies in Tourism
23 2007* (pp. 65-76). Wien, Austria: Springer.
- 24
25 Stewart, S., & Vogt, C. (1999). A case-based approach to understanding vacation Planning.
26 *Leisure Sciences*, 21, 79-95.
- 27
28 Storbacka, K., Brodie, R. J., Böhmman, T., Maglio, P. P., & Nenonen, S. (2016). Actor
29 engagement as a microfoundation for value co-creation. *Journal of Business Research*,
30 69(8), 3008-3017.
- 31
32 Suddendorf, T., & Corballis, M. C. (2007). The evolution of foresight: What is mental time
33 travel, and is it unique to humans? *Behavioral and Brain Sciences*, 30, 299-351.
- 34
35 Sugathan, P., & Ranjan, K. R. (2019). Co-creating the tourism experience. *Journal of
36 Business Research*, 100, 207-217.
- 37
38 Sujan, M. (1985). Consumer knowledge: Effects on evaluation strategies mediating consumer
39 judgements. *Journal of Consumer Research*, 12(1), 31-46.
- 40
41 Teichmann, K. (2011). Expertise, experience and self-confidence in consumers' travel
42 information search. *International Journal of Culture, Tourism and Hospitality Research*,
43 5(2), 184-194.
- 44
45 Tourangeau, R., Rips, L. J., & Rasinski, K. (2000). *The Psychology of Survey Response*.
46 Cambridge, UK: Cambridge University Press.
- 47
48 Tsaour, S. H., Yen, C. H., & Chen, C. L. (2010). Independent tourist knowledge and skills.
49 *Annals of Tourism Research*, 37(4), 1035-1054.
- 50
51 Tung, V. W. S., & Ritchie, J. R. B. (2011). Exploring the essence of memorable tourism
52 experiences. *Annals of Tourism Research*, 38(4), 1367-1386.
- 53
54 Van Boven, L., & Ashworth, L. (2007). Looking forward, looking back: Anticipation is more
55 evocative than retrospective. *Journal of Experimental Psychology: General*, 136(2), 289-
56 300.
- 57
58 Vargo, S. L., & Akaka, M. A. (2012). Value cocreation and service systems (re)formation: A
59 service ecosystems view. *Service Science*, 4(3), 207-217.
- 60
61
62
63
64
65

- 1 Vargo, S. L., & Lusch, R. F. (2004). Evolving to a new dominant logic for marketing.
2 *Journal of Marketing*, 68(1), 1-17.
- 3 Vargo, S. L., & Lusch, R. F. (2008). Service-dominant logic: Continuing the evolution.
4 *Journal of the Academy of Marketing Science*, 36(1), 1-10.
- 5 Vargo, S. L., & Lusch, R. F. (2016). Institutions and axioms: An extension and update of
6 service-dominant logic. *Journal of the Academy of Marketing Science*, 44(1), 5-23.
- 7 Victorino, L., Verma, R., Plaschka, G., & Dev, C. (2005). Service innovation and customer
8 choices in the hospitality industry. *Managing Service Quality: An International Journal*,
9 15(6), 555–576.
- 10 Volo, S. (2009). Conceptualizing experience: A tourist based approach. *Journal of*
11 *Hospitality Marketing & Management*, 18(2–3), 111–126.
- 12 Voorberg, W. H., Bekkers, V. J. J. M., & Tummers, L. G. (2015). A systematic review of co-
13 creation and co-production: Embarking on the social innovation journey. *Public*
14 *Management Review*, 17(9), 1333-1357.
- 15 Xiang, Z., & Gretzel, U. (2010). Role of social media in online travel information search.
16 *Tourism Management*, 31(2), 179-188.
- 17 Xiang, Z., Magnini, V. P., & Fesenmaier, D. R. (2015). Information technology and
18 consumer behaviour in travel and tourism: Insights from travel planning using the internet.
19 *Journal of Retailing and Consumer Service*, 22, 244-249.
- 20 Yen, C. H., Teng, H. Y., & Tzeng, J. C. (2020). Innovativeness and customer value co-
21 creation behaviors: Mediating role of customer engagement. *International Journal of*
22 *Hospitality Management*, 88, 102514. <https://doi.org/10.1016/j.ijhm.2020.102514>
- 23 Yi, Y., & Gong, T. (2013). Customer value co-creation behavior: Scale development and
24 validation. *Journal of Business Research*, 66(9), 1279-1284.
- 25 Yoon, Y., & Uysal, M. (2005). An examination of the effects of motivation and satisfaction
26 on destination loyalty: A structural model. *Tourism Management*, 26(1), 45-56.
- 27 Zhang, J., Ito, N., & Liu, J. (2018). The role of perceived online social capital in predicting
28 travel information engagement. In B. Stangl, & J. Pesonen (Eds.), *Information and*
29 *Communication Technologies in Tourism 2018* (pp. 200-213). Cham, Switzerland:
30 Springer.
- 31 Zhang, T. (2020). Co-creating tourism experiences through a traveler’s journey: A
32 perspective article. *Tourism Review*, 75(1), 56-60.
- 33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65

Ainhize Eletxigerra (PhD, University of the Basque Country) has been research personnel in training with a Predoctoral scholarship of the Government of the Basque Country until she completed her thesis on value co-creation in place marketing in 2019. She is actually in the University of Aveiro in a postdoctoral stay. She is also member of the research group Governance and Marketing for Sustainability. Her research interests regard co-creation, service-dominant logic, tourism and urban contexts, consumer behaviour, resources, and networks. She has published in journals such as *Journal of Destination Marketing & Management* and *Journal of Environmental Planning and Management*.

Jose M. Barrutia (PhD, University of the Basque Country) is a full professor of marketing at the University of the Basque Country-UPV/EHU (Spain) and a former senior associate member at the European Studies Centre, St. Antony's College, University of Oxford (UK). He actually leads the Governance and Marketing for Sustainability research group. He has been a consultant manager for PricewaterhouseCoopers, Director of Marketing for a Regional Bank, and Director of Economics and Planning of the Basque Government. His research focuses on services, sustainability, co-creation, and networking. He has published in journals such as *Journal of Service Research*, *Journal of Destination Marketing & Management*, *Journal of Service Management*, *Global Environmental Change*, *International Journal of Advertising*, *Journal of Sustainable Tourism*, *The Service Industries Journal*, *Public Management Review*, *Energy Policy*, *Journal of Cleaner Production*, *Journal of Environmental Management*, *Journal of Environmental Planning and Management*, *Regional Studies*, and *European Journal of Marketing* among others.

Carmen Echebarria (PhD, University of the Basque Country) is a full professor of economics at the Department of Applied Economics I and a former senior associate member at the European Studies Centre, St. Antony's College, University of Oxford (UK). She is likewise a research associate member at the Institute of Applied Business Economics- University of the Basque Country-UPV/EHU (Spain). Until 2019, she has led the Governance and Marketing for Sustainability research group. Her research fields concern sustainable development, networking, innovation, and tourism and her research has appeared in journals such as *Global Environmental Change*, *Journal of Destination Marketing & Management*, *Journal of Cleaner Production*, *Energy Policy*, *Geoforum*, *Journal of Sustainable Tourism*, *Public Management Review*, *Journal of Environmental Management*, *Regional Studies*, *Papers in Regional Science*, *Journal of Environmental Planning and Management*, *International Journal of Advertising*, *The Service Industries Journal*, and *European Journal of Marketing*, among others.

Dr. Ainhize Eletxigerra



Prof. Jose M. Barrutia



Prof. Carmen Echebarria



Credit author statement

Ainhize Eletxigerra: Conceptualization, Methodology, Software, Formal analysis, Investigation, Data Curation, Writing – Original Draft, Writing – Review & Editing, Visualization, Project administration, Funding acquisition. **Jose M. Barrutia:**

Conceptualization, Methodology, Software, Validation, Formal analysis, Investigation, Resources, Writing – Original Draft, Writing – Review & Editing, Supervision, Funding acquisition. **Carmen Echebarria:** Conceptualization, Methodology, Validation, Formal analysis, Investigation, Resources, Supervision, Funding acquisition.