"DART model from a customer's perspective: an exploratory study in the hospitality industry of Greece"

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ARTICLE INFO	Konstantinos Solakis, Jesús C. Peña-Vinces and Jesús Manuel Lopéz-Bonilla (2017). DART model from a customer's perspective: an exploratory study in the hospitality industry of Greece. <i>Problems and Perspectives in Management</i> , <i>15</i> (2-3), 536-548. doi:10.21511/ppm.15(si).2017.07
DOI	http://dx.doi.org/10.21511/ppm.15(si).2017.07
RELEASED ON	Wednesday, 27 September 2017
RECEIVED ON	Tuesday, 18 April 2017
ACCEPTED ON	Tuesday, 16 May 2017
LICENSE	CC) EV-NC This work is licensed under a Creative Commons Attribution-NonCommercial 4.0 International License
JOURNAL	"Problems and Perspectives in Management"
ISSN PRINT	1727-7051
ISSN ONLINE	1810-5467
PUBLISHER	LLC "Consulting Publishing Company "Business Perspectives"
FOUNDER	LLC "Consulting Publishing Company "Business Perspectives"

O NUMBER OF REFERENCES

6

81

1

NUMBER OF TABLES

2

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**BUSINESS PERSPECTIVES** 



LLC "CPC "Business Perspectives" Hryhorii Skovoroda lane, 10, Sumy, 40022, Ukraine

www.businessperspectives.org

**Received on:** 18<sup>th</sup> of April, 2017 **Accepted on:** 16<sup>th</sup> of May, 2017

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## DART MODEL FROM A CUSTOMER'S PERSPECTIVE: AN EXPLORATORY STUDY IN THE HOSPITALITY INDUSTRY OF GREECE

#### Abstract

The customers are an essential element for marketing decisions and became a factor decisive to develop collaborations with the company. The study examines the four building blocks of the interaction of the DART model (Dialogue, Access, Risk Assessment, Transparency) in the hospitality industry from the client's perception. This approach of the research is paramount, as value co-creation and DART model especially are based on a dialogical process between equal partners. That means that the principles of the four building blocks of interaction are equally applied to all the actors involved. This argument is amplified as the dividing line between producers and consumers is barely evident in the service-dominant logic. The exploratory study has been carried out at the Makedonia International Airport in Thessaloniki, Greece. Partial Least Squares (PLS) provides empirical support to conduct the exploratory study.

Keywords

DART model, S-D logic, positive experience, hospitality industry

JEL Classification Z3, Z32, L83

## INTRODUCTION

Information and Communication Technology (ICT) has dramatically changed the tourism industry (Buhalis, 2003; Buhalis & Foerste, 2014; Tussyadiah, 2015) and has allowed visitor transactions to occur at any time and in any place (booking hotel rooms, buying aeroplane tickets, and so on) creating a dynamic environment for tourists. Travelers can interact with not only other tourists, but also companies, brands, and products (Gretzel & Jamal, 2009; Harridge-March & Quinton, 2009) and they can actively engage in various points of a product's lifecycle (McCabe, Sharples, & Foster, 2012; Neuhofer, 2016; Roser, Samson, Cruz-Valdivieso, & Humphreys, 2009).

In this dynamic environment, tourism and hospitality marketing must adapt and evolve to service-dominant logic (SDL) (Chathoth, Altinay, Harrington, Okumus, & Chan, 2013; Hayslip, Gallarza, & Andreu, 2013; Park & Vargo, 2012). Proposed by Vargo and Lusch (2004), SDL seems to be the most suitable for interpreting today's tourism market, as tourism is mainly a service management sector (Hayslip et al., 2013; Lashley, 2008). SDL focuses on service and the co-creation of value with the customer actively participating in the process of the service using his knowledge, skills, and experience to shape the final deliverable (Park & Vargo, 2012; Vargo & Lusch, 2004a, 2004b). This concept paved the way for value co-creation (VCC) within various socio-economic factors, because different entities implicitly or explicitly remain involved in the various phases of tourism (Tsiotsou & Goldsmith, 2012). Some operational frameworks and measurement tools were developed for VCC (Galvagno & Dalli, 2014; Payne, Storbacka, & Frow, 2008; Ranjan & Read, 2014; Skaržauskaitė, 2013; Yi & Gong, 2013). Prahalad and Ramaswamy (2004b) suggested four building blocks of interactions characterzing the process of VCC: Dialogue, Access, Risk-Assessment, and Transparency, which are also known as the DART model. The DART model is simple and considered the most impressive and efficient one for firms providing a rigid framework for VCC implementation (Albinsson, Perera, & Sautter, 2016; Mukhtar, Ismail, & Yahya, 2012; Payne et al., 2008; Skaržauskaitė, 2013; Tanev, 2011).

Consequently, the aim of this study is to evaluate the DART model in the hospitality, filling in the literature gap in the tourism industry (Chan, Yim, & Lam, 2010; Chathoth, Ungson, Harrington, & Chan, 2016; Morosan, 2015). This research develops a measurement scale to validate the model from a customer's perspective rather than a firm's perspective. This approach is based on a dialogical process between equal partners, which means that the principles of the four building blocks of interaction are equally applied to all the actors involved. This argument is emphasized, since the dividing line between producers and consumers is unclear (Ramaswamy, 2011). This study identifies linkages in the literature between the DART model and customer's experience, satisfaction, and loyalty to develop the theoretical framework. The methodology and implications are presented in the later sections.

### **1. LITERATURE REVIEW**

### 1.1. What is S-D logic?

Vargo and Lusch (2004a) perceived the market changes in the 21st century and identified a shift in focus from products to services and from producers to consumers. As a result, they introduced service-dominant logic (SDL). SDL is a groundbreaking theory not because of the innovation or the discovery of something new, but because of the discovery of something old. Just like Plato's cave allegory (Plato, 2004) when a change in the perspective of the prisoners revealed to them that what they saw on the cave's wall were just shadows cast by real objects. The same way Vargo and Lusch (2015) with SDL theory explained to us a different perspective on the market, a perspective where the product's importance lies in service provision. Thus, the products are the shadows cast by service.

More specifically, S-D logic is based on 11 foundational premises condensed to 5 axioms (Table 1). These foundational premises and axioms have evolved in time through a constant dialogue and interaction between Vargo and Lush (2015) and the research community (Vargo & Lusch, 2015). The first axiom that remained unchanged from the original theory underpins the role of service

in SDL as the application of operant resources (skills and knowledge) (Park & Vargo, 2012; Vargo & Lusch, 2008b). The second axiom defines value as a co-created value not only between a firm and a customer, but also between multiple actors, including always the one who benefits (Vargo & Lusch, 2015). In this axiom, there was an evolution from co-produce (Vargo & Lusch, 2004a) to cocreation (Vargo & Lusch, 2004a, 2006) and from dyadic interactions to interactions between multiple actors (Vargo & Lusch, 2015). The third and the fourth axioms were not present at the original FPs but added on 2008 (Vargo & Lusch, 2008a, 2015). The third axiom states that all the actors involved in the value co-creation process are resource integrators, while the fourth axiom describes value as something that only the beneficiary can shape (Vargo & Lusch, 2008b). Finally, the fifth axiom is the latest addition to S-D logic and emphasizes the role of institutions in the behavior of the actors (Vargo & Lusch, 2015).

These five axioms underpin the role of service in the marketing and the substantial role of the actors in the value co-creation, which is fundamental in S-D logic. Core ideas of S-D logic such as service and value co-creation are widely accepted (Galvagno & Dalli, 2014; Grönroos & Gummerus, 2014; Grönroos, Strandvik, & Heinonen, 2015; Gummesson & Grönroos, 2012; Williams, 2012).

Source: Vargo and Lusch (2015).

Axioms of service-dominant logic				
1st	Service is the fundamental basis of exchange			
2nd	Value is co-created by multiple actors, always including the beneficiary			
3rd	All social and economic actors are resource integrators			
4th	Value is always uniquely and phenomenologically determined by the beneficiary			
5th	Value co-creation is coordinated through actor-generated institutions and institutional arrangements			

SDL has set the basis and stimulated research to blossom in different perspectives especially in the value co-creation area. The shift from the traditional market where the customers were just the recipients of products to markets where customers with knowledge and skills have the power to engage in the Value co-creation process actively has begun.

### 1.2. What is value co-creation (VCC)?

Prahalad and Ramaswamy (2000) described the shift from the customers' traditional role to the ability to co-create value as an evolution. The dynamic engagement of the clients with the firms and other actors allows them to create value (Galvagno & Dalli, 2014; Prahalad & Ramaswamy, 2000). Vargo and Lusch (2015) in S-D logic theory state that value is not dyadic but includes a variety of actors among which is always the beneficiary. The beneficiary is also the one that will determine the value within a context with actor generated institutions and institutional arrangements.

On the other hand, service logic (SL) researchers argue that SDL's aspect on VCC is misty and difficult to provide managerial practicality (Grönroos et al., 2015). On the contrary to SDL, SL examines in depth and explicitly the value co-creation process (Grönroos et al., 2015). In this sense, a service logic lexicon was introduced by Grönroos and Gummerus (2014) providing 19 definitions on SL terms of which 14 are about value co-creation. More specifically, value is considered as value in use, while VCC is considered as: "Actions taken by the actors on a co-creation platform, where the actors may directly and actively influence each other's processes (e.g., supplier service process and customer consumption and value creation processes)" (Grönroos & Gummerus, 2014, p. 91).

Also, customer-dominant logic researchers use the term "value formation" instead of value creation to denote that is a process where value emerges and not deliberately created (Heinonen & Strandvik, 2015). This value is also value in use and appears in an individual and social context in two different but tangled processes, the providers and the customers. Service logic introduces the term of presence instead of interaction as an element of value formation (Heinonen & Strandvik, 2015). Presence is focused on the provider and how provider's value proposal in the physical and mental state (Heinonen & Strandvik, 2015).

Frow, Payne and Storbacka (2011) after a literature review on the subject consider that VCC essential elements are: (1) active involvement of at least two "actors"; (2) the integration of resources that creates novel and mutually beneficial value; (3) a willingness to interact and co-create; and (4) a "spectrum" of potential forms of collaboration (Frow et al., 2011, p. 1). That led theь to define VCC as "An interactive process, involving at least two willing resource integrating actors, which are engaged in a particular form(s) of mutually beneficial collaboration, resulting in value creation for those actors" (Frow et al., 2011, p. 1).

Last but not least, Galvagno and Dalli (2014) after a systematic and extended literature review on VCC describe the process as "... the joint, collaborative, concurrent, peer-like process of producing a new value, both materially and symbolically" (Galvagno & Dalli, 2014).

However, the research on VCC is not limited to the above references, on the contrary, there are some papers and research streams such as consumer culture theory that debate on the subject (Frow et al., 2011; Galvagno & Dalli, 2014; Saarijärvi, Kannan, & Kuusela, 2013). All these differences of the research streams on VCC presented above indicate the importance of the new firm-customer dynamic relationship (Galvagno & Dalli, 2014; Mustak, Jaakkola, & Halinen, 2013). In this dynamic relationship, interaction and dialogue are the keywords. An interaction where firms and actors must have an active role and engage with each other in order VCC to occur (Grönroos & Voima, 2013). Hence, customers are integral creators of all kinds of resources to create value (Grönroos & Ravald, 2011; Heinonen et al., 2010; Lusch & Vargo, 2006).

### 1.3. VCC models

Some operational frameworks and measurement tools for VCC are developed (Galvagno & Dalli, 2014; Payne et al., 2008; Ranjan & Read, 2014; Skaržauskaitė, 2013; Yi & Gong, 2013). Mukhtar (2012) presented a categorization of co-creation models and co-creation techniques. Co-creation models are the context to the VCC process, while techniques are methods to interact actively and engage actors in order firms to learn from a customer. Each technique has its characteristics and serves a particular purpose, hence, the right choice and combination of models and techniques is needed in order for VCC process to be successful (Mukhtar et al., 2012).

Skaržauskaitė (2013) has made an extensive research on the models that were developed to manage and measure VCC. Models were divided into two categories: (a) theoretical models of co-creation from customers' perspective and (b) theoretical models of co-creation in organizational and management contexts. The overview of these models concluded that there is a lack of empirical models with quantitative data to measure and manage VCC. Nonetheless, four models are presented in this research as some of the most acknowledged and discussed in the VCC literature.

Such model of VCC is the model of Payne et al. (2008), their model entails three sets of processes involving customer, supplier, and encounter. The names of the methods indicate the one who participates in VCC actions or both of them. Hence:

- a. Customer processes, the customers' experiences from the products or/and services lead to knowledge and decision whether to continue this relationship or not.
- b. Company's processes. Firms take actions to provide VCC opportunities, acquire knowledge from the customers and for the custom-

ers and facilitate them to VCC. These activities also involve planning, implementation and development of metrics.

c. Encounter processes.

Both customers and suppliers meet each other for a two-way interaction. These interactions can entangle, from firm's perspective, telephone calls, invoicing, etc., or, from customer's perspective, inquiries, complaints, etc., or, from both perspectives, a meeting at a trade fair.

According to Payne et al. (2008), three form of encounters facilitate VCC. These are:

- Communication encounters.
- Actions from firms to promote connection and dialogue with the customer.
- Usage encounters.
- Actions from customers using the product or/and service through services that support usage.
- Service encounters.
- Interactions between the customer and the service personnel or application.
- In addition, encounters can be categorized as:
  - Emotion-supporting encounters themes, metaphors, stories, analogies, recognition, new possibilities, surprise, design;

Cognition-supporting encounters – scripts, customer promises, value-explaining messages, outcomes, references, testimonials, functionality; and behavior and action supporting encounters – trial, know-how communication, and usage of the product (Payne et al., 2008, p. 90).

Each type of encounter has different characteristics that are optimal for various use in VCC. As Payne et al. (2008) state, some contacts promote customer experience, while others are ideal for VCC. Finally, these encounters can be critical negative or critical positive meaning very satisfying or very dissatisfying interactions (Bitner, Booms, & Tetreault, 1990).

Another VCC framework is the one from Ranjan and Read (2014). Their VCC model is based on value

co-production and in value in use which are the two primary dimensions of VCC. Sub-elements comprise these two essential elements. In the value coproduction, these sub-elements are knowledge sharing, equity, and interaction, on the other hand, value in use consists of experience, personalization and relationship. Based on this theoretical framework, they also developed a measurement index of VCC.

Yi and Gong (2013) presented a VCC framework that analyzes customers' VCC behavior. The authors consider two types of behavior: a) customer participation behavior and b) customer citizenship behavior. The first is essential for VCC to be successful, while the second is not critical to VCC process and it is voluntary. Nonetheless, customer citizenship behavior adds "...extraordinary value to the firm" (Yi & Gong, 2013, p. 1280). Customer participation behavior consists of four dimensions: a) information seeking, b) information sharing, c) responsible behavior, and d) personal interaction. On the other hand, customer citizenship behavior also comprises of four dimensions: a) feedback, b) advocacy, c) helping, and d) tolerance. Based on this theoretical model, the researchers developed a customer VCC behavior measurement scale from customer's point of view.

Finally, DART model, the conceptual framework of Prahalad and Ramaswamy (2004b) is based on dialogue (Tanev et al., 2011). The four building blocks of this context, Dialogue, Access, Risk Assessment and Transparency, are essential for VCC to occur. DART model is about the dialogue between actors as an active engagement between equal partners (Prahalad & Ramaswamy, 2004b). In order for customers to engage in such a productive conversation, firms must provide access to information about the products and the services (Prahalad & Ramaswamy, 2004b). Furthermore, companies must allow access to tools for customers to contribute and collaborate with the first. Access enhances the feeling of equity for the actors, while transparency on the company's operations enhances trust (Prahalad & Ramaswamy, 2004a, 2004b). Also, access and transparency allow customers to assess risks and benefits from the use of the product or the service.

While all four models are fascinating, DART model is considered the most efficient one, which provides a rigid framework for VCC implementation (Albinsson et al., 2016; Mukhtar et al., 2012; Payne et al., 2008; Skaržauskaitė, 2013; Tanev et al., 2011).

### 1.4. DART model

Not many researchers have applied and evaluated the DART model. An extended search revealed four studies related to the use and evaluation of the DART model. Spena, Carida, Colurcio, and Melia (2012) used the DART model as at heoretical framework in qualitative research on store experience and co-creation. Their findings suggest that the success of temporary stores in Italy lies in the deployment of the four building blocks of interaction. VCC emerges because of the interaction and the experiential relation between the firm and the customer.

Mazur and Zaborek (2014) evaluated the DART model in a study on Polish service and manufacturing companies using a quantitative methodology. Confirmatory factor analysis was used for 30 indicators initially and a final grey of 13 indicators. They suggest, "...the DART model may not be an accurate representation of co-creation practices in companies" (Mazur & Zaborek, 2014, p. 106).

Albinsson et al. (2016) developed a scale for the four constructs of the DART model. The DART model was used to evaluate service loyalty and shared responsibility. More specifically, they investigated whether shared responsibility is related to a high DART assessment and whether a significant assessment is related to customer loyalty. A survey was conducted online with a sample of 269 university students. The respondents had to choose a company and think of a particular product or service to answer the questions. Confirmatory factor analysis was used, and the findings suggested a positive relationship between shared responsibility and the DART model. However, the various implications could only show a partial relationship between the DART model and service loyalty. Among the four building blocks, only (???) had a significant interaction with loyalty.

Taghizadeh, Jayaraman, Ismail, and Rahman (2016) developed a scale for the DART model and applied it to innovation strategy and market performance. Survey data from 249 managers from telecommunication companies were tested using Partial Least Squares Structural Equation Modelling (PLS-SEM). The results of the analysis showed a strong, positive relationship between DART and the innovation strategy.

Consequently, there is a lack of research concerning the DART model and the hospitality industry.

## 1.5. VCC and positive hotel guest experience

The fundamental characteristics of the traditional hospitality industry are guest services and experience, while the primary product is the provision of accommodations or catering, which are homogeneous (Lashley, 2008; Orfila-Sintes & Mattsson, 2009; Reisinger, 2001). Consequently, differentiation lies in the enhancement of their fundamental characteristics. Creating and providing high-quality services and unique and enriched experiences for guests give hotels advantages over their competitors (Chathoth et al., 2013; Choi & Chu, 2001; Prahalad & Ramaswamy, 2004a; Walls, Okumus, Wang, & Kwun, 2011).

Services are designed to be experienced by customers, and creating experiences is the core of the hospitality industry (Neuhofer, Buhalis, & Ladkin, 2015). Unique personalized experience is at the heart of VCC (Prahalad & Ramaswamy, 2004, 2004) and VCC is an essential element of SDL (Vargo, Maglio, & Akaka, 2008). Helkkula, Kelleher, and Pihlstrom (2012) define co-created value as "value in the experience", which means the "...individual service customers' live experience of value that extends beyond the current context of service use to also include the past and future experience and service customers' broader lifeworld contexts" (p. 59). Majboub (2014) suggests that ... "tourism providers need to create "experience environments" by integrating resources to co-create high value experience..." (p. 27). Therefore, the application of VCC can upgrade a hotel's service by offering unique, personalized experience.

# 1.6. DART model and positive experience

DART's dimensions are presented in relation to customer's experience in the hospitality context. As a building block of interaction, dialogue is the only way to interact and share knowledge (Ballantyne, 2004; Ballantyne & Varey, 2006; Grönroos, 2004; Prahalad & Ramaswamy, 2004). Dialogue entails profound and dynamic engagement and interaction that lead to the co-creation of experience (Binkhorst & Dekker, 2009; Prebensen, Vittersø, & Dahl, 2013). The better the quality of the dialogue, the more valuable the co-created experience (Binkhorst & Dekker, 2009). It means that hotels that want to offer a unique experience for their guests must provide a variety of channels and opportunities for the dialogue to occur.

Apart from the dialogue, access also enhances customer experience, as it facilitates more efficient exchange (Albinsson et al., 2016). Firms provide access to tools and information for the customers to co-create the value experience (Prahalad & Ramaswamy, 2004, 2004). Access also juxtaposes ownership (Prahalad & Ramaswamy, 2004) by providing access to lifestyles and disregarding the need to "own" them. This is an essential element in the context of hospitality, as many firms allow access to exotic or luxurious experience.

Hotels must provide ways to access their tools and information, such as reservation systems, social media accounts, and lifestyles. These facilitate more productive dialogue and therefore better customer experience (Binkhorst & Dekker, 2009). Nonetheless, by accessing information and tools, the co-creation process poses risks for all the actors involved. Risk assessment of the co-creation outcome must be made by all the actors involved in the VCC (Albinsson et al., 2016; Prahalad & Ramaswamy, 2004). Firms should communicate not only the benefits, but also the potential risks of their proposals to help their customers make informed decisions and boost trust between them (Prahalad & Ramaswamy, 2004, 2004).

Transparency is the fourth building block of interaction and concerns the "symmetry of information during interactions, which enables the rise of strategic information and trust capital for both partners" (Spena et al., 2012, p. 24). Transparency is crucial for a genuine active dialogue between equal partners. A firm's openness facilitates trust, equality, and discussion, which leads to enhanced customer experience.

Therefore, four building blocks of the DART model have a positive effect on customers' experience, and this leads to the following propositions: P1. Dialogue with the hotel enhances customers' experience.

P2. Accessibility of the firm's information and tools increases customers' experience.

P3. Risk assessment by the hotel increases customers' experience.

P4. Transparency of the hotel's data enhances customers' experience.

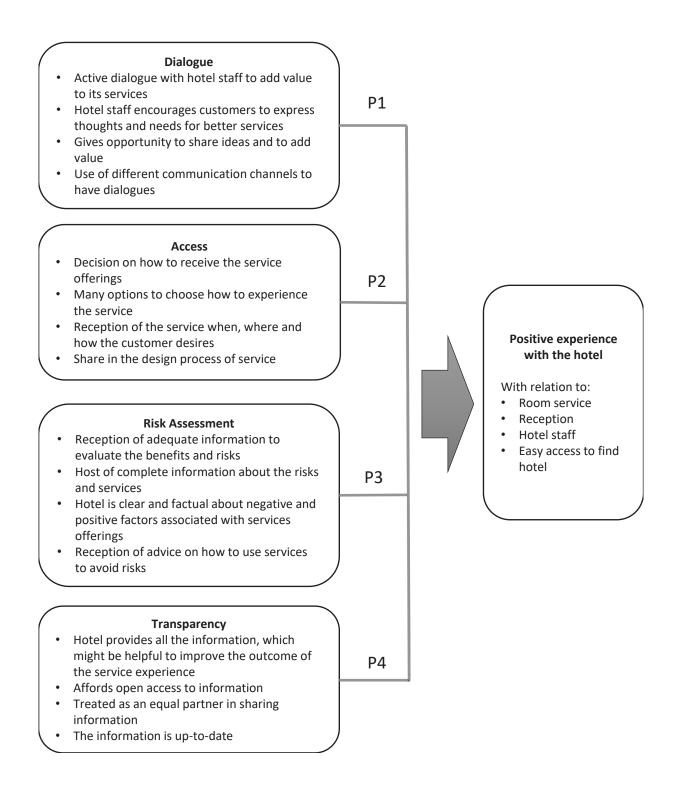


Figure 1. Conceptual framework for DART

### 2. METHODOLOGY

#### 2.1. Measures development

The constructs were conceptualized in the previous section, whereas here we develop the items to measure the concepts (Bhattacherjee, 2012). Indicators concerning the DART model were drawn from the literature. More specifically, four items for dialogue, three items for access, three items for risk assessment, and three items for transparency were adapted from Albinsson et al. (2016). Two items from Mazur and Zaborek (2014) were used, one for risk and one for transparency. For access, one item is adopted from Taghizadeh et al. (2016). Finally, items were adopted from Grissemann and Stokburger-Sauer (2012) for positive experience and modified accordingly. In total, 20 items were developed for five constructs (see items in Table 2). All the elements were measured using a 5-point Likert scale ranging from 1 ("totally disagree") to 5 ("totally agree").

The model was assessed using the PLS-SEM technique, a form of Structural Equation Modelling that provides a "robust framework for estimating causal models with latent variables and systems of simultaneous equations with measurement errors" (Ringle & Sinkovics, 2004, p. 310). One of the advantages of PLS-SEM is that it can be used for either exploratory or confirmatory research (Lowry & Gaskin, 2014), which makes it popular among researchers. Smart PLS v.3 was used to apply the PLS-SEM methodology.

## 2.2. Data collection and sampling and Exploratory study

A pilot test was run to detect potential problems in the questionnaire design. The pilot testing survey took place at the Makedonia International Airport in Thessaloniki, Greece. The researcher obtained permission to conduct the questionnaire at the departure gates, where the travellers are more carefree and relaxed, since they have passed all the checkpoints. Questionnaires were given to travellers who had stayed at a hotel in the days before their departure. The questionnaires were given on a single day, and 44 passengers met the criteria and were willing to participate. The number of surveys is adequate, as a pilot survey needs only a small sample number from the target population (Bhattacherjee, 2012). The pilot study revealed some minor syntax and grammatical errors, which were corrected. The data were also used to test the validity and reliability of the model.

The questionnaire was designed and divided into two parts, one for demographic information and the other for the measurement items. The sample is travellers at the airport who are waiting for outbound flights. These travellers must have stayed at a hotel before their trip to fill in the questionnaire. SmartPLS v.3 was used to establish construct validity by running bootstrap to perform a confirmatory factor analysis (CFA) (see Table 2).Aboutconstruct validity, the loadingswere significant, ranging from 0.64 to 1 (Bhatnagar, Kim, & Many, 2014). However, two items had negative values and were eliminated from the model (Carmines & Zeller, 1979). The last argument is well documented by Panagopoulos, Kanellopoulos, Karachanidis, and Konstantinidis (2011, p. 697), "In Greece, hotel websites give the impression of an overpriced brochure and act as an information and contact providers, while only a small amount of hotels provide online reservation and booking capabilities". Zafiropoulos and Vrana (2006) in their research on Greek hospitality industry concluded that less than a quarter of all Greek hotel websites offer online booking and reservation. Although such a study was written almost a decade ago, it is indicative of Greek hotel managers' attitude on being interactive with the customer and sharing information. Regarding the second item with the negative value, the attempt to justify it focuses on the lack of spatial hospitality planning in Greece. Most of the hotels are scattered throughout Greece to any possible location near the sea, as blooming tourism leads to illegal coastal development (Andriotis, 2006). Many hotels are located at "nowhere" street, as these streets are not registered.

The convergent validity of the measurement model was assessed using the average variance extracted (AVE) procedure (Fornell & Larcker, 1981). Convergent validity indicates how closely a measure is related to a construct (Bhattacherjee, 2012). Acceptable values for AVE and CR are above 0.5

#### Table 2. Constructs and its results

VARIABLES		â	AVE	Ŕ	ĉ
DIALOGUE WITH HOTEL		0.837	0.655	0.882	0.665
I had an active dialogue with the hotel staff on how to add value for its services	0.802				
The hotel staff encouraged me to express my thoughts and needs for better services	0.702				
The hotel gave me the opportunity to share my ideas to add value to its services	0.798				
I used different communication channels to have dialogue sessions with hotel staff	0.920				
ACCESS TO HOTEL		0.805	0.628	0.869	0.628
I could decide how to receive the services offering	0.793				
I could have many options to choose how to experience the service/ product offering	0.876				
I could receive the service/product offering when, where and how I want it	0.835				
I had the opportunity to share in the design process of service/product	0.646				
TRUST WITH HOTEL		1	1	1	1
I received adequate information to evaluate the benefits and risks of the hotel's services	1				
I obtained complete information about the risks and advantages of the hotel's service	1				
The hotel was very clear and factual about both the negative and positive factors associated with the services offering	1				
The hotel personnel gave me advice me on how to use its services to avoid various kinds of risks	1				
TRANSPARENCY OF THIS HOTEL		0.812	0.634	0.772	0.634
The hotel provided me all the information, which might be helpful to improve the outcomes of the service experience	0.886				
The hotel affords me open access to information that might be useful in enhancing the overall design and delivery of the service experience	0.885				
I was treated as an equal partner in sharing information that was needed to achieve a successful hotel service experience	-0.428				
The information (costs and pricing) provided by the hotel was up-to-date, which fosters the best possible experience with relation to its services they offer	0.886				
Positive experience with hotel		0.626	0.606	0.788	0.606
I had a positive experience with relation to room service	0.840				
I had a positive experience with reception	0.876				
I had a positive experience with hotel staff	0.946				
I had a positive experience with relation to easy access to find the hotel					

Note:  $\hat{\lambda}$  = Loadings;  $\hat{\alpha}$  = Cronbach's Alpha;  $\hat{R}$ : Composite Reliability;  $\hat{c}$ : Communality.

and 0.7, respectively (Fornell & Larcker, 1981). The values for all the constructs exceeded these numbers (see Table 2). The reliability of the construct was evaluated using Cronbach's Alpha as a measure of internal consistency (Bhattacherjee, 2012) and the composite reliability (CR) (Fornell &

Larcker, 1981). The value for satisfaction was excellent (a > 0.9) for access, while they were good (a > 0.7) for dialogue, risk assessment, and transparency. The value was acceptable (a > 0.6) for positive experience (Bhatnagar, Kim, & Many, 2014).

## CONCLUSION AND IMPLICATIONS

The main conclusion that can be drawn from the literature review is that SDL and VCC form a new marketing landscape. Advances in ICT enable a plethora of points of interaction between consumers and firms with equivalent engagement possibilities to exchange dialogue and co-create anywhere and at any time (Buhalis, 2003; Buhalis & O'Connor, 2005; Chathoth et al., 2013; Gretzel, Fesenmaier, & O'Leary, 2006; Ramaswamy, 2008; Tanev, 2011). Consequently, it is inevitable that hotels must provide customers access to tools and information to co-create value experience. The four building blocks of interaction from the DART model offer a path to enhanced interaction between firms and customers. This increased interaction can lead to VCC. This study attempted to evaluate the DART model in the hospitality context, as there is a lack of research on VCC in this particular sector (Morosan, 2015). More specifically, this research evaluated the DART model from a customer's perspective in relation to the formation of positive experience about room service, reception, hotel staff, easy access to find the hotel.

Numerous implications could be drawn from this study. At a theoretical level, this research assessed whether the application of the DART model to the hospitality industry contributes to customer's positive experience. On a managerial level, managers can evaluate a hotel's "openness" to clients and also the possibilities and offerings for co-creation. The use of this model can reveal the strengths and weaknesses of the methods employed for active interaction with their clients, especially since this model is focused on the customer's perspective. Lastly, the use of this model can help managers to improve their understanding of VCC procedures and redesign hotel services and operations accordingly.

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