

# A Service Science View of a Sustainable Destination Management

Luca Carrubbo, Andrea Moretta Tartaglione

University of Cassino and Southern Lazio, Cassino (FR), Italy

Primiano Di Nauta

University of Foggia, Foggia, Italy

Alberto Bilotta

University La Sapienza, Roma, Italy

We live in a service age. In everyday life, as well as in business management, every action, behaviour, process, strategy is increasingly oriented to service. Gradually, every human activity is positively affected by service logics in search of better performance and improved quality levels. Tourism business is strongly affected by the principles of service sciences, in fact, in tourism, both the internal organization of companies and the external promotion of destinations are strictly related to service. Moreover, we can observe how all relations intended for the development of tourism, as well as wise and competitive destination management are based on service logics. Thus, this paper aims at highlighting the relevant role of new service paradigms within the strategic and operational models of destination management, as well as the significant contribution of Service Sciences, Management and Engineering and Design (SSMED) foundations to business competitiveness for today's tourism enterprises. After analyzing the common behaviors of tourism destination actors, it has been possible to deploy a comparison between different statistical trends triggering a transition toward the service age. Thereafter, direct effects of verified changes on today's destination systems have been examined, highlighting an emerging common vision of organizations, operations, strategies, markets, and developments on tourism services.

*Keywords:* service science, value co-creation, destination management, tourism services

## The Increasing Importance of a Service Perspective for Competitiveness Today

Life is changing. Decision making is based on changing elements, and nowadays interpretation models need to be dynamic as well. The growing relevance of service in every productive sector, for all business strategies, in any situation, and the recent related developments of service oriented logics (Levitt, 1981) lead to new concepts of competitiveness (Rust, 2004), success, sustainability, survival (Barile, 2009; Golinelli, 2010). These concepts are theoretically valid for "tourism business management", but they may, certainly and

---

Luca Carrubbo, Ph.D. in Business Management, Department of Economics and Law, University of Cassino and Southern Lazio.  
Andrea Moretta Tartaglione, Assistant Professor of Business Management, Department of Economics and Law, University of Cassino and Southern Lazio.

Primiano Di Nauta, Assistant Professor of Business Management, Department of Economics, University of Foggia.

Alberto Bilotta, Ph.D. Student in Business Management, Department of Management, University La Sapienza.

Correspondence concerning this article should be addressed to Luca Carrubbo, Via Sant'Angelo snc, Località Folcara, 03043, Cassino (FR), Italy. E-mail: l.carrubbo@unicas.it.

especially, be put into practice in “destination management”. Today, the ability to evolve, adapting ourselves to internal and external changes, represents the main requirement to compete and gain adequate market share. Often, within tourism destination systems, firms have to consider becoming part of a network (Polese & Minguzzi, 2009; Polese, 2009), in order to share complementary resources, and to offer a better overall service (Basole & Rouse, 2008; Ng et al., 2012), involving tourists, operators, and third parties (stakeholders). Indeed, nowadays tourism quite frequently stresses policies based on service logics and a reticular approach towards a sort of evolutions for destination systems, becoming more efficient, complex, perhaps, even smarter. The focus on collaboration strategies, the value of customer participation in co-creation processes (Woodruff, 1997; Polese, Pels, & Brodie, 2011) and the common willingness to upgrade supply quality, following production service logic, highlight the possibility to use new scientific service centered proposals to interpret tourism phenomena.

Starting from Porter’s (1980) thinking, the concentration of similar interconnected firms in a delimited geographical region provides global competitive advantages, and according to recent international studies which focus on service, the networking culture assumes greater relevance in the business of tourism destinations, involving the active participation on behalf of producers/providers, distributors/dealers, facilitators/enablers, intermediaries/organizers, consumers/users. Considering Porter’s (1998) diamond model, we may have four foundational elements for competitive advantages within a delimited area, such as condition factors (high quality and specialized resources), related and supporting industries (clusters of firms), demand conditions (sophisticated segments), and context (public investments and sustained upgrading). Indeed, following the main principles of service sciences, it may be possible to review the relevance of certain statistics in tourism economics, as well as business trends for destination operators, more or less knowingly related to one another. As regards each specific reference of emerging service sciences (Maglio & Spohrer, 2008a, 2008b), and starting from recent propositions made by IBM researchers (Spohrer, Anderson, Ager, & Pass, 2008), we should take into account 10 different foundational premises for the interpretation of evidences and events. These are: resources; entities; access rights; value co-creation interactions; governance interactions; outcomes; stakeholders; measures; networks; and ecology.

The analysis of recent tourism historical trends, for several specific tourism destinations, can allow for interesting evaluations and the identification of specific contact points existing with the 10 founding concepts of SSMED (Spohrer, Anderson, Pass, & Ager, 2008), according to the following research steps:

- Highlighting new tourist trends;
- Examining the 10 service sciences founding concepts;
- Detecting their correlation with tourism phenomenon;
- Reviewing results from a service science perspective;
- Proposing final thoughts for future works and researches.

### **New Tourism Trends for Destination Management**

Tourism has been challenged by strong and substantial changes on both the demand and supply side (Kotler, Bowen, & Makens, 2009), nevertheless, it is still an important driver and competitive factor for many geographical areas and world economies.

On the supply side, to respond and to cope with the most independent and informed demand (Pencarelli, 2003), tourism companies have had to continuously adjust their “products” (Smith, 1994). The tourism service

is now much broader than before, more attentive to the specific needs of differentiated, enriched, and personalized tourists, constantly in search of a new “perceived” and sustainable expansion. The characteristics of the offered “product” (flexible, scalable, organizational, elastic, and highly promotional) allow for international development through increased exports and gradual settlement attempts outside the locality, overcoming the traditional difficulties of their traditional linked services (intangible, perishable, non-storable, characterized by the simultaneity between offer and use). The so-called “area products” (Golinelli & Simoni, 2005) is a great example. In fact, area products enhance the allocation of resources in a limited area, so as to attract tourists from the successful international market. The attraction ability usually depends on the presence of certain stratagems associated with “heritage” interest, and judged by the existence of a network of related services and strategic relationships (Sheth & Parvatiyar, 2000). Such a finding fits perfectly with the concepts of interaction (Hakansson & Snehota, 1995; Prahalad & Ramaswamy, 2004), co-creation (Ballantyne & Varey, 2006), mutual benefit (Bartlett & Ghoshal, 1990), re-presented by service logics in general (Vargo & Morgan, 2005; Vargo, Maglio, & Akaka, 2008). Indeed, from mass tourism to the experience economy (Pine & Gilmore, 2000), the evolution of the concepts of a tourism product is the result of an overall remarkable change that concerns society as a whole.

Demand wise the tourism product is perceived as the overall tourism experience, on the basis of tourists’ perceptions and appreciations. Supply wise, it is a system of resources and expertises based on integrations and interactions emerging and enhancing the attractive factors (Della Corte, 2000), as interpreted by the service sciences (Maglio & Spohrer, 2008a; Maglio, Kieliszewski, & Spohrer, 2010). Such factors are considered as elements of consumer representation, and simultaneously offered by companies that through attractions, facilities, accessibility and reports, organize, implement and offer them to the market (Rispoli & Tamma, 1992). In recent decades, the increasing tourism demands, and the corresponding rise of tourist flows have been well-represented by the spending power improvement (thanks to the higher average wealth), an increase in the number of trips (also linked to phenomena of social mobility and employment, higher education, more leisure time, and increasing aging rate), distances cover more easily (in virtue of technology development in the transportation sector and the relentless electronic diffusion) and a significant change in tourism services consumption patterns, based on a more general change of perspective (Echtner & Prasad, 2003). Such interpretation emphasizes the importance linked to relations (Grönroos, 2000), relationship marketing (Gummesson, 1999), service marketing (Lovelock & Gummesson, 2004), and emphasizes the concepts of “global product”. The best examples of these concepts are club products, or organizational formulas that aggregate inside a collective management of special initiatives, aiming at the promotion of a uniform set of tourism resources suited to serve the selected target market (Pencarelli, 2003). Within certain regions, many activities have been promoted to encourage the demands of international tourism, above all, it has been done to benefit local tourism businesses (Casarin, 1996; Caroli, 1999), especially small enterprises, which not always able to independently pursue a policy of continuous and significant development (due to the lack of financial resources, knowhow, and appropriate contractual capacity), specifically according to a network logic. In this sense, we can say that tourism destinations may be intended as a location that offers multiple services which enable tourists to visit local attractions. This concept may be applied in many ways, such as a theme park or a country club hotel, both owned and operated by a single commercial group of companies through supporting services of other close operators such as restaurants, spas, shops, transports (Vellas & Becherel, 1999), managed by a central administration board, allowing for a cohesive identity, or a specific universal brand name.

The interdependence of attractions, services, transportation, information, and promotions stresses the required collaboration of all actors located within the same geographical area or in its close proximities (Polese & Carrubbo, 2008). To be efficient, a tourism destination should operate as an integrated system that share with the other systems that have the same visions and purposes. Other academic interpretations on tourism destinations were deployed in terms of “package”, “set”, “amalgam”, stressing concepts of integration (Buhalis, 2000), availability (Pearce, 1992), cooperation (de Araujo & Bramwell, 2002), attractions (Pechlaner & Weiermaier, 2000). This kind of synergic cooperation (Della Corte, 2000) fosters an innovative environment, quality improvement, active customer participation (e.g., economy experiences, Pine and Gilmore, 2000).

In the model for destination competitiveness formulated by Ritchie and Crouch (2003), a specific differentiation was made between destination infrastructures (water, sewage system, roads, etc.) and destination superstructures (tourist services such as hotels, restaurants, information centers, etc.). By analyzing the studies carried out by Crouch (1992), we can say that holiday costs represent the first determinants of destination performances. They include transport services and from the destinations, accommodation, food, beverages, tour services. Price competitiveness refers to exchange rate movements, productivity levels, and qualitative factors affecting the destination attractiveness.

Statistically, tourism has certainly become more sophisticated, organized and aware of customer needs. In particular, destination management shows more land attraction possibilities and leads to an improved vacation time experience. Such trends are confirmed by statistics on tourism organizations (in Europe and in Italy). We may note a general duration increase of holidays (nights spent within a same delimited area), especially in leisure tourism, using hotels and complementary structures for accommodations (see Figure 1).

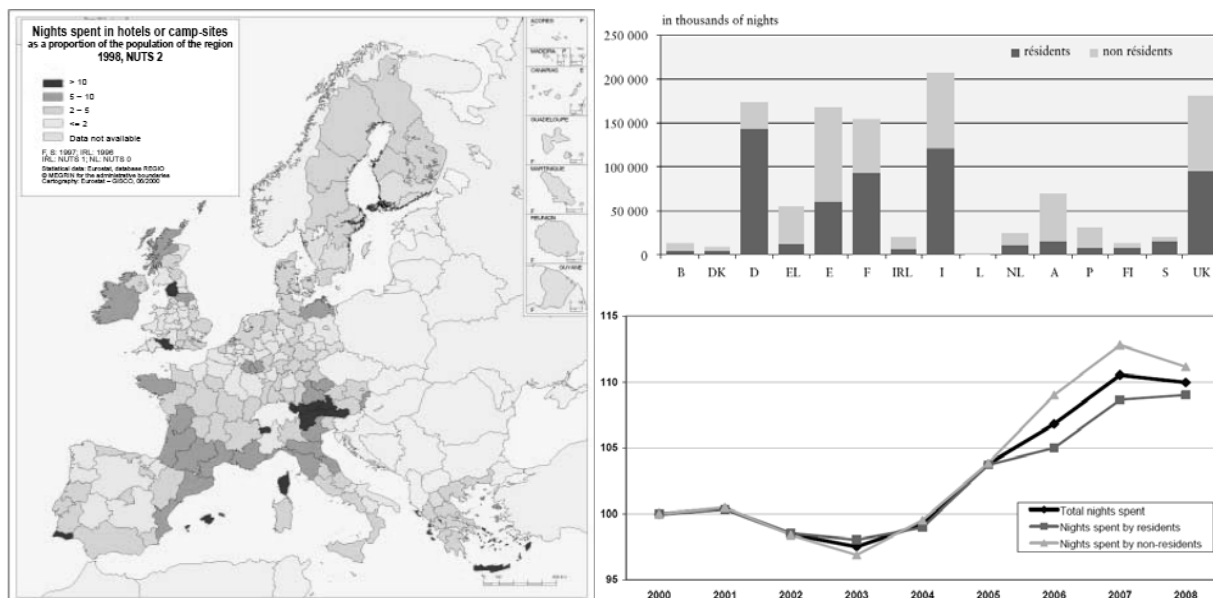


Figure 1. Evolution of the number of nights spent per holiday, EU27, 1998-2008. Source: Elaboration on ISNART Union Camere, 2009 ISTAT.

In particular, observing the situation in Italy (see Figure 2), there has been a sort of evolution both for the individual travel organization and the number of nights spent within the same geographical area. In Italy, compared with 2002, the proportion between nights spent for each leisure holiday remarkably rose comparing two different periods (2002-2004 vs. 2007-2009), we see the higher level of average per each travel length.

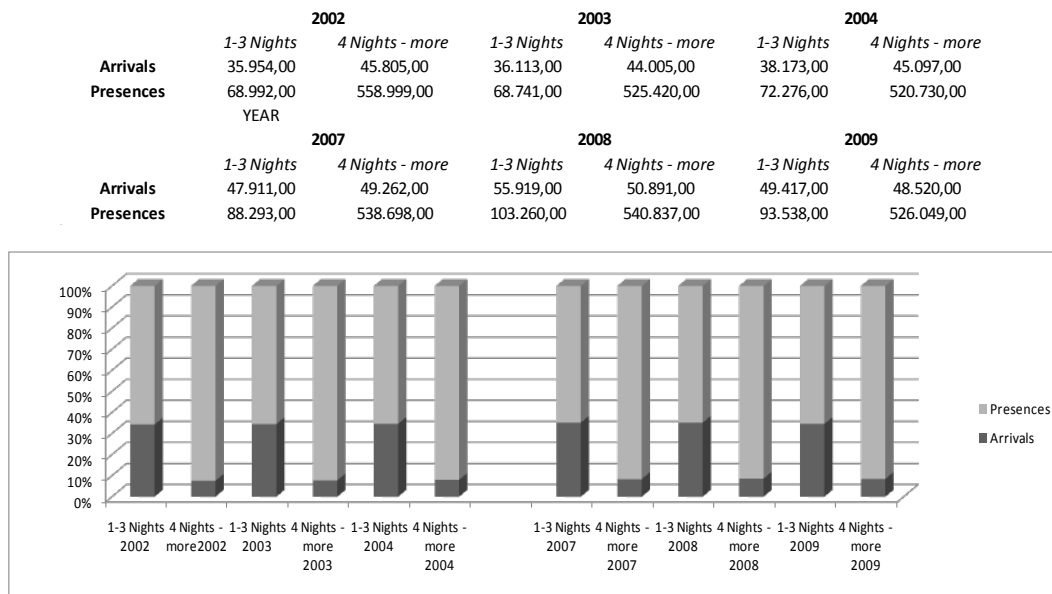


Figure 2. Evolution of the number of nights spent per holiday, 2002-2009, Italy. Source: Authors' elaboration on 2010 ISTAT data.

The arising number of nights spent per travel, and the duration of reservations within a single “wide place” in general, highlight the more efficient organization of defined tourism destinations. The ability to favour and manage several choices inside the same geographical area allows for the growth of tourism flows and reinforces. In the long run, the global competitiveness of the territory enriches global development, innovation and sustainability.

The harmonization of local needs, and the exploitation of the complementarities of interests must take into account the possibility of combinations and the complex nature of cross-links (Polese & Minguzzi, 2009), in order to achieve the correct appreciation of the actual characteristics and potential of a specific territory (country specifics). Therefore, in general the ability to orient the client and build quality offers that meet the expectations of multiple targets of tourists, moves its focus from the activities performed by the individual company to a broader level that affects the target as a whole (Polese, 2009). An imperative for the tourism of any “place” is to present the destination offer as a set, more or less articulate, of tourism opportunities and experiences, definable and recognizable as a whole.

In this sense, destination management is to be understood as an attempt to promote and organize the integration of resources of a specific area. In fact, such resources converge within an organization to create tourism, so that it increases its performance and its ability to compete. From the whole system perspective (Mele, Pels, & Polese, 2010), the set of environmental and instrumental factors contribute to the definition of global tourism products, and link the following:

- elements of attraction in destination and transit areas, whether natural, manmade (heritage), cultural (museums, theaters, festivals), social (local living, socializing opportunities);
- services and facilities in the destination and transit areas (hotels, dining, sports, transportation, other services and facilities);
- access to target elements (road, rail, airports and seaways, type of vehicle, transportation service schedules, customs control);

- the image of the destination, which often influences the image of each single organization operating on that specific territory.

With such an approach, destination management may represent the strategic, organizational, and operational means as a whole, to manage the process of identifying, building, promoting and marketing the service product delivered by a specific tourism location (Martini, 2005). Ultimately, in this context, in order to stand out and maintain a distinctive position on the market, the targets must also have adequate and solid professional skills, with reference to the enhancement of tourism, the aggregation purpose, and the necessary synergies to be activated on the territory (Godfrey & Clarke, 2002).

### **SSMED Fundamental Concepts**

Service science is an IBM initiative (conceived by Almaden Research Centre in US) engaging hundreds of researchers worldwide in an attempt to promote a new meta-discipline capable of satisfying an emerging research issue: the study of service systems (Maglio & Spohrer, 2008b). This is a multidisciplinary “open source” project, based on many pillars represented by computer sciences, human behaviors, organizational theories, industrial engineering, business strategy, management sciences, social and cognitive sciences, as well as legal sciences.

In terms of science, it examines service systems and their evolutions, referring to the roles of people, knowledge, shared information and technology, as well as the relevance of customers (demand) inside production processes (supply). In terms of management, it studies how to improve efficiency evaluations, relations of sustainability and systems. In terms of engineering, it develops new technologies, adequate approaches to promote information verification, measurement and diffusion. In terms of design, it analyzes technique configurations and studies so as to correctly structure service systems.

Accordingly, service dominant logic (Vargo & Lusch, 2008) and service science (Maglio & Spohrer, 2008a, 2008b), see emerging service system studies as the analysis of how and how much any specific kinds of system can be “interpreted” especially, as something following service logics. New reflections about value creation models have been carried out for service systems. In such models, the form or nature do not refer to the type of contribution on behalf of the actors involved in value generation processes. Instead, they highlight the improving interaction dynamic between system elements and the relevance of resources allocation, collaboration advantages and the importance of alliances, roles, rules, and cooperative strategies (Castells, 1996; Gulati, 1998).

By analyzing the main concepts of service science, as recently proven by SSMED researchers, it is possible to outline the key elements for this study (as shown in Figure 3), starting from the 10 founding premises discussed above.

Following, for each SSMED FCs, we find the specific detail reported by authors (Maglio, Spohrer, Ager, & Pass in 2008), also including other personal comments or syntheses on the same subject:

- (1) Resources: anything that has a name and is useful can be considered as a resource.
- (2) Entities: some complex resource configurations can initiate actions, and these are called service system entities (or just entities, or simply service systems).
- (3) Access rights: dealing with the social norms and legal regulations associated with resource access and usage.
- (4) Value co-creation interactions: also known as value-proposition-based interaction mechanisms.

(5) Governance interactions: intuitively, governance mechanisms are a type of value-proposition between an authority service system entity and a community of governed service system entities.

(6) Outcomes: when service system entities interact, value-co-creation is the only one of the possible outcomes.

(7) Stakeholders: the four primary types of stakeholders are customers, providers, authorities, and competitors.

(8) Measures: the four primary types of measures are quality, productivity, compliance, and sustainable innovation.

(9) Networks: also known as service system networks, service system entities interact with other service system entities (normatively) via value-propositions.

(10) Ecology: also known as service system ecology, the macro-scale interactions of the populations of different types of service system entities.

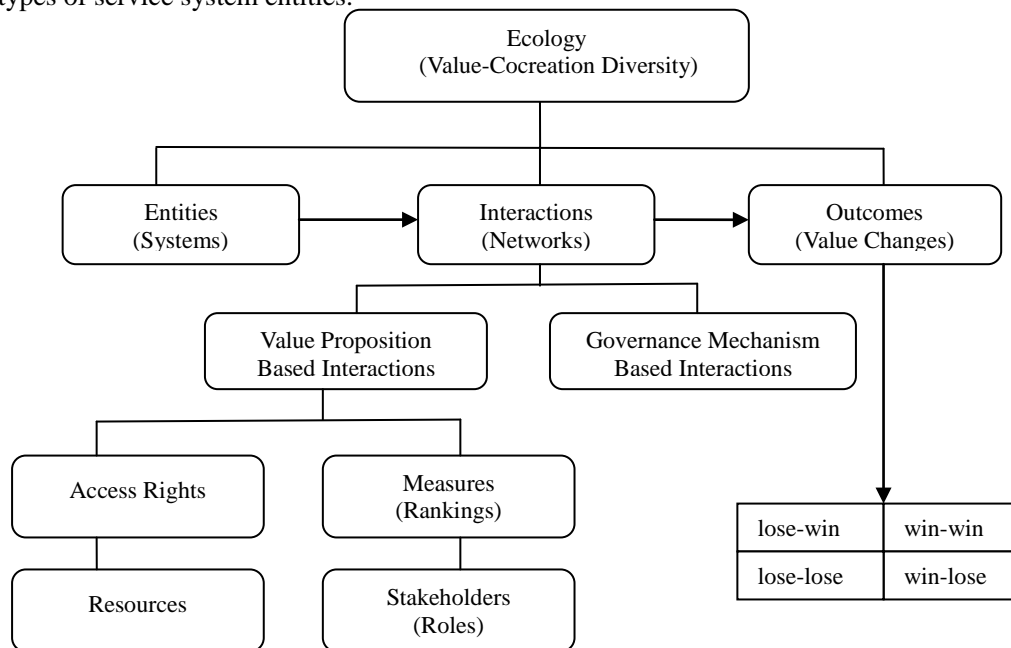


Figure 3. SSMED foundations. Source: Spohrer and Maglio, 2008.

### SSMED Implications for Destination Management

What attracts visitors, residents, companies, investors, and stakeholders to a specific place?

Most reasons were explained by cluster theories, in which companies within a tourism destination tend to cluster, forming critical masses in one place to take advantages of synergies such as increased productivity, higher leverage of innovation, and service management (Grönroos, 2000), and, in essence, the possibility to increase competitiveness.

Therefore, following service science foundations, it is possible to define direct consequences for destination management, in terms of organization and logistics, destination marketing, risk sharing, global efficiency are deriving from two principal categorization of system features, such as interactions and configurations.

In service science, resources, both physical and non-physical, are potentially useful (Maglio et al., 2008)

(SSMED FC 1—Resource), starting from well-known definition of service systems, resources are usually identifiable with the concepts of persons, business, shared information, and technology. In system frameworks, available resources may be guaranteed by a satisfactory relationship between organizations (Mele & Polese, 2009), reinforcing coordination and harmonization, in order to better manage their acquisition of resources (Golinelli, 2009; Barile & Polese, 2009). Considering the collective participation in the construction of tourism offers, we should take into account a shared vision for destination development and its valorization position, regarding the relevant role of resources sharing in a system context. On a daily basis, we need to manage politics, operations, and relations, with the goals to gain competitiveness and strengthen relationships with outsiders.

In service science, all service system entities are resources, but not all resources are service system entities. Intuitively, entities are people, businesses, government agencies, and non-profit organizations (Spohrer, Maglio, Bailey, & Gruhl, 2007) (SSMED FC 2—Entities). Service systems are socially constructed collections of service events in which participants exchange beneficial actions through a knowledge-based strategy that captures value from a provider-client relationship (Katzan, 2008). A service system is any number of elements, interconnections, attributes, and stakeholders interacting in a co-productive relationship that creates value, in which principal interactions take place at the interface between providers and customers (Spohrer, Vargo, Maglio, & Caswell, 2008), focusing on engineering and delivering services using all available means to realize respective values for both providers and consumers (Qiu, 2009). Using the reticular approach, destination operators may act as catalysts also for external entrepreneurial initiatives, directing them to common goals rather than to individual projects, enabling an increasing collective negotiating power towards other entities or stakeholders.

In service science, value co-creation interactions are mechanisms for changing the entities access rights to resources referring to service system interactions and outcomes (Maglio, Srinivasan, Kreulen, & Spohrer, 2006), reinforcing the contributions of actor groups (associations, consortia, joint ventures) (SSMED FC 3—access rights). Access rights are referred to properties (owned outright), contracts (leased rights), public uses (shared access), and personal relations (privileged access). As for destinations, it is interesting to relate the organizations to historical and artistic attractions, considering the relationships between the events, strategic positioning, cooperation, and individual objectives (in terms of seasonality, target customers, etc.), in order to synergistically fit in a unique plan of activities to promote a destination, enhancing the effects of interactive actions. With the view to achieve such, organizations have to know and study the kind of resources and existing local factors, such as infrastructure, accessibility, accommodation, public policies, entrepreneurship, attractions, and specific features (climate, location, culture, history, ability to perform activities, and special events).

For service science, value co-creation interactions are promises and contracts that entities agree to keep as they believe they are implementing value-co-creation for all involved entities (Lusch, Vargo, & O'Brien, 2007) (SSMED FC 4—value co-creation interactions). Subsequently, interaction becomes a value driver that allows for service systems to develop a joint process of value creation, service systems can create competitive advantages by improving reticular relationships (Lusch, Vargo, & Tanniru, 2009).

Therefore, the value generation process of a destination and related management models both refer to a co-creation logic in which territorial actors actively participate within a sophisticated organization (Crouch, 2006), a production district, a social system or a smart service system (Spohrer, 2010; Barile & Polese, 2010, 2011; Demirkan, Spohrer, & Krishna, 2011a, 2011b). In tourism destinations, achieved mechanisms of



co-production and a universal image for communications and marketing allow for the entire system to take on the role of real resource integrator, with distinctive features and specific final goals.

For service science, governance interactions depend on the degree of compliance of the governed entities (Maglio, Spohrer, Ager, & Pass, 2008) (SSMED FC 5—governance interactions). The ability to establish relationships delineates the actual efficiency of government actions which contribute to the equilibrium of the systems (internal viewpoint), and satisfaction of supra-systems (external viewpoint) (Barile & Polese, 2009). Insisting on destination systems, we have to favor: (1) the presence of strong meta-management bodies and a shared destination strategic plan; (2) the involvement of different categories of private operators in the management of the destinations; and (3) the concentration of resources on a defined number of initiatives truly regarding the heritage and attractions of the destinations. Typically, for the development of a destination, the role of meta-manager is made by a recognized public board. Whatever the genesis and nature of the meta-management board shows the importance of the involvement of different categories of actors (businesses and tourism trade associations, cultural institutions, etc.) of the destinations. These actors, also called viable service systems, interacting with each other, can contribute to the development of a specific local system, which is a representation of all possible systems organized within a specific territory/destination (Barile & Di Nauta, 2011).

The above consideration can be described combining the theoretical frameworks of service sciences and viable systems approaches (Golinelli, 2010). From this perspective, a destination is a viable system territory, composed by territorial systems able to support government decisions which aim at improving the chances of survival of the specific areas, at the same time, allowing for the evolutions of project proposals for:

- The heritage of a region;
- The development of a regional vocation;
- The growth of competitiveness of territorial systems.

Service sciences and viable systems approach (VSA) research highlight possible outcomes of service systems: (1) win-win; (2) lose-lose; (3) win-lose; and (4) lose-win (Maglio et al., 2008) (SSMED FC 6—outcomes). Tourism business competitiveness and long term sustainability are related to the ability to cooperate, arise service quality, and involve every operant organization under the win-win logic. To develop a coordination policy means to define the territorial system, its philosophy and values, determining a competitive analysis, and implementing monitoring and evaluation in collaboration.

For service sciences, business and social systems address more than the four fundamental stakeholder perspectives (customer, provider, authority, and competition). And it is possible to methodize the types of value-co-creation interactions, as shown by Maglio, Spohrer, Ager, and Pass in 2008, considering other stakeholder perspectives including employees, partners, entrepreneurs, criminals, victims, underserved, citizens, managers, children, the elderly, and many others (SSMED FC 7—stakeholders). Also for destinations, such actions indeed may be decided and approved by different stakeholders. In some cases, the local authority (municipality, province, farm tourism promotion) is to play the role of the main government body for the destination management. In other cases, other subjects (coordinator subject and/or proponent subject) intervene on the government process. All three subjects compose the whole government body. In synthesis, we have three logical levels of government:

- The Ordinator Subject (O.S.), usually the local authority, deputed to the identification of action paths deriving from a subjective reading of the environment that, through the identification of vocations, leads to the

extraction of one or more contexts to which possible coordinators should focus on;

- One or more Coordinator Subjects (C.S.), able to develop proposals within the contexts identified by the O.S.;
- One or more Proponent Subjects (P.S.), involved in projects connected with the proposals made by the C.S..

There is no rigid distinction between subjects and roles, generally, the variety of destination management issues require specific skills rarely owned by a single subject. As a consequence, the necessity to place other subjects in support of the local authority should clarify the fact that the local authority is present in all the phases of the governing process, especially in monitoring activities. In addition, the role of the O.S. must necessarily be carried out by an institutional subject, while the C.S. and the P.S. may be institutional or private, or even mix organizations together. Of course, the action paths identified by the O.S. fall within an upstream decision making context, which could refer to other subjects of a higher decision making levels (Barile & Di Nauta, 2011). The various levels are structured according to a typical application effectively covered in VSA, as shown in the following figure.

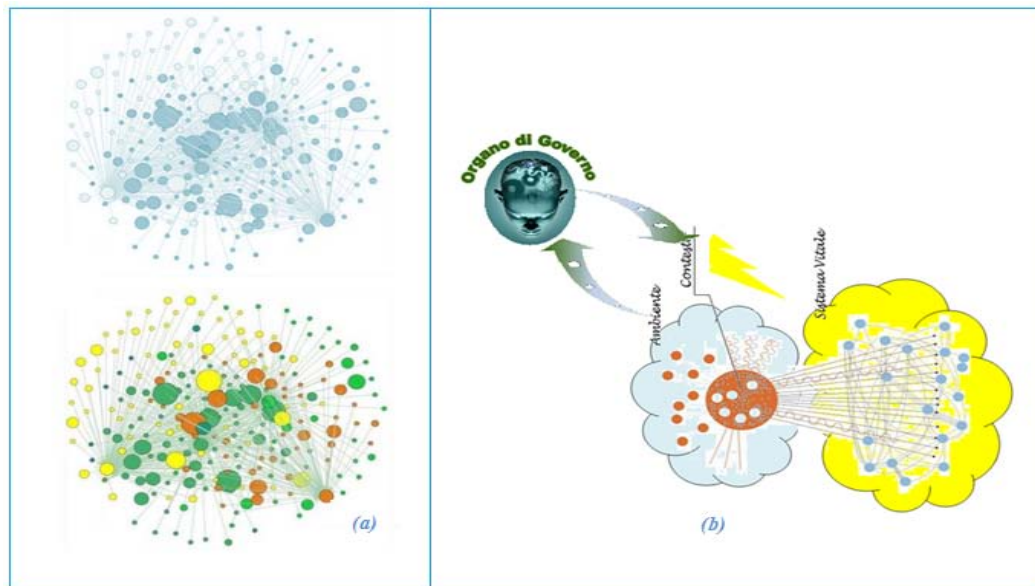


Figure 4. Extraction of contexts by the government body. Source: Barile and Di Nauta, 2011.

The present figure summarizes the steps, pointing out, in the Figure 4—image (a), how from the same environment different government bodies (e.g., O.S, C.S, P.S) can extract different contexts (in different shapes and colors). In the Figure 4—image (b), more specifically, shows how in the “cloud” identified as the viable system, the involved components are not only those already in the context, but appear to be even more numerous than in the starting environment next to the decision maker.

In service science, any decision-making of the government body corresponds to different stakeholder perspective: customers (quality); providers (productivity); authorities (compliance); and competitors (innovation) (Maglio et al., 2008) (SSMED FC 8—measures). According to the new rule of quality management, for destination competitiveness, we have to increase the effectiveness of the meta-management activities (supply quality control, promotion and communication initiatives, and co-ordination of individual

initiatives). An effective destination management plan is the only way to reach the level of organization that is required on national and international markets. In this process, such a plan coordinates all the strategic activities that until now have had aimless proposals of organization, marketing, warranty, and standards of service quality and experience, skilled human resources, development, financing, management capacity. Routine interactions may be characterized as relationships and service system networks (SSMED FC 9—networks). In today's scenario, the allocation and distribution of resources, system collaboration advantages, the relevance of alliances, the roles and rules of networks, and cooperative strategies, all contribute to the conceptualization of the service value networks (Allee, 2000; Lusch, Vargo, & Tanniru, 2009), in which, according to the concepts of “embeddedness” (Granovetter, 1985), economic actors cannot be considered separate from other organisations or from their operating contexts. Each node that acts as a part of service business process represents a foundational partner and supports the whole system (“*nothing happens in isolation*”—Barabási, 2002) enjoying network advantages (resource-sharing, synergic interactions, common purpose, group power) for global value creation. In all cases, the performance of destinations in terms of quantity and quality of tourist flows and the performance of local firms (facility employment rates, price ranges, etc.) are linked to the presence of a clear strategic positioning expressed by local operators which are able to encourage collaboration between the different categories of operators producing tourism services. Such a collaboration creates an integrated quality and overcomes the tendency to manage independently the different services in a short-term logic (Polese, Russo, & Carrubbo, 2010).

Finally, within service sciences, ecology is characterized both by the diversity of service system entity types and their relative numbers (Maglio et al., 2008) (SSMED FC 10—Ecology). A service ecosystem is a network of spatially and temporally aligned social-economic actors that exchange resources and connect via value propositions, languages, technologies, and norms (Lusch, Vargo, & Tanniru, 2010). In this sense, destination management projects, even when activated by the government body, should always be based on a strong identification by destination operators and cannot therefore neglect to actively seek the involvement of local actors.

### **A Think Tank for the Interpretation of New Destination Strategies with a SSMED Perspective**

After examining the main considerations on possible implications for destination management deriving from the SSMED views, it is now possible to try to model synthetic operative reflections which refer to modern tourist strategies.

Starting from the fundamental concepts of the service science, it is possible to decline practical implications for destination management and tourist operations, in terms of:

- Organization and logistics;
- Destination marketing;
- Tourism risk sharing;
- Destination global efficiency.

Through the use of a tool, such as a think tank, we may easily highlight the direct effects of science services in terms of interpretation for the competitiveness of a modern service system, which is definable as a tourist destination.

Based on a service-centered approach, we have tried to find a plausible connection between the current

destination marketing and new forms of value generation process, including the organizations of a tourism system, the available resources, special access rights, and governance interactions.

Furthermore, we have also considered a link between the modern risk sharing strategies and the system approaches of reticular aggregates, including the overall efficiency of a defined destination, and the determination and measurement of results achieved and achievable through integrated management of the processes that provide tourist services. Below we wish to represent a sort of integration of scientific reflection on systems thinking and service logic linked to destination management representing possible tourism. Think tank (as shown in Figure 5) is a proposal for the systematization of the fundamental concepts of service sciences.

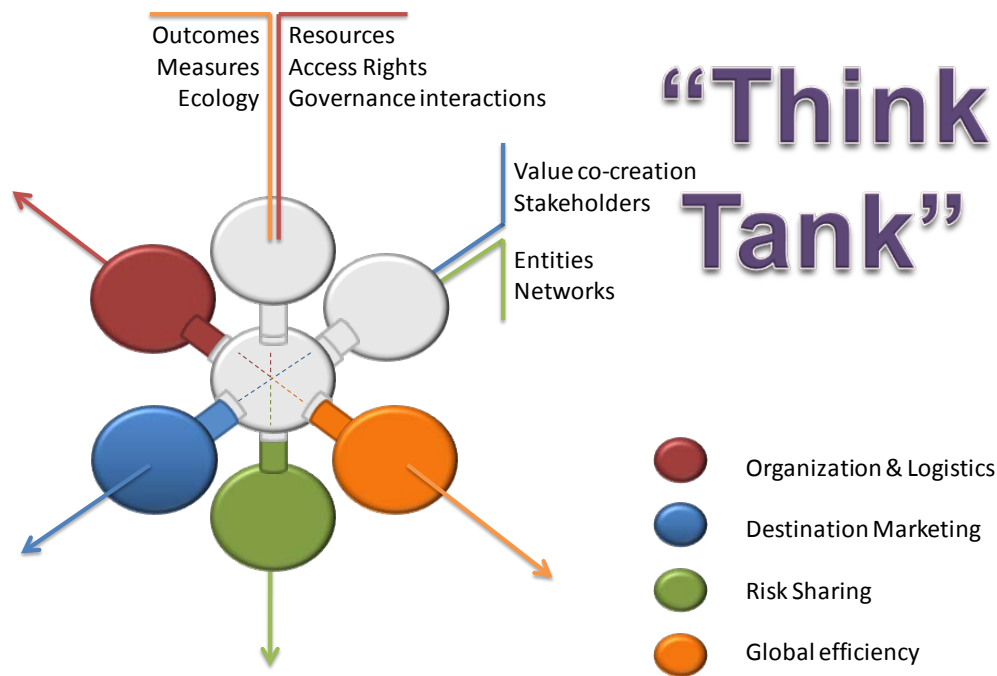


Figure 5. Tourism think tank. Source: Authors' elaboration.

### New Logics for Destination Marketing

Today, the development of tourism destination follows a reticular approach to business organization, therefore, tourism trends soon are viewed through a network analysis. From another perspective, today successful business is also based on distinctive capacities and resources, allowing the use of VRIO analysis (based on value, rarity, imitability, and organization—Barney and Hesterly, 2005) to evaluate the relative levels. Therefore, SSMD principles can really lead to review the active destination mechanism for tourism “product” provision.

At this point, the process of creating value for a destination management and its related models seem to mainly refer to the logic of co-creation (SSMD FC 4—value co-creation interactions), in which local actors actively participate in the added value of broad collective activities, within a larger and more sophisticated organization (Crouch, 1996; Ritchie & Crouch, 2003), an industrial district, a social system or even a smart service system (Hammer & Spohrer, 2008b; Barile & Polese, 2009, 2010). As indicated in the Figure 6, established mechanisms of co-production, resources sharing, collaborative strategies, collective marketing

efforts through the communication of a universal image identification, the political network and a service spirit (more or less consciously determined) make the actual destination—an integrator of resources, with special features and precise long-term objectives (Kotler, Bowen, & Makens, 2009).

The possibility to create promotional activities for many attractions (historical, artistic, cultural, sports, religious, wellness, and others) inevitably triggers the interest of several third parties, more or less integrated, involved, and active in the provision of the related services (SSMED FC 7—stakeholders).

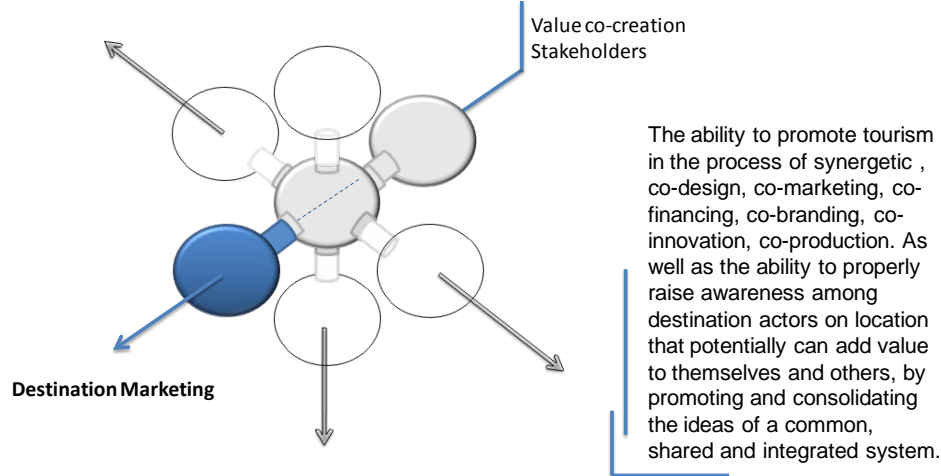


Figure 6. Destination marketing. Source: Authors' elaboration.

### New Solutions for Tourism Organization and Logistics

According to the SSMED principles, it appears possible to reinterpret the mechanisms operating in a service production and the related operations that supply tourism destination products. Recalling the increasing participation within a framework offered by all of the available resources, remarkable is the shared vision of a geographically specific path of development and the importance of resource sharing (SSMED FC 1—resource). Within a system context, it is necessary to continuously promote policies, operations, and relationships in order to help achieve the correct level of competition and the strengthening of external relations (Echtner & Prasad, 2003), especially in order to support an organized structure of relationships in its self-sustenance, self-regulating, self-pacing and self-development.

In many cases, the meta-organization of a destination is represented by the local government (municipality, county, or cluster of municipalities), as it is considered closer to the territory, receptive and supportive of the different instances, while, in other cases, the action of global management is entrusted to the initiative of individuals or groups of companies capable of working horizontally across the tourism industry and promoting actions that are particularly important in terms of infrastructure, logistics, and organization. These should be able to create iterated positive effects that start virtuous circles, otherwise unimaginable or however, not easily achievable. In both cases the importance of territorial governance rises revealing its capability to seize opportunities and contingent risks, which can support the collective balance and positive interactions, which empower the system to function properly (SSMED FC 5—governance interactions), as shown in the Figure 7.

According to the new role assigned to quality destination management, it is also necessary to consider initiatives that improve coordination, communication, control, guidance, recovery, reinforcing the contribution made by groups or associations, consortia or joint ventures (SSMED FC 3—access rights).

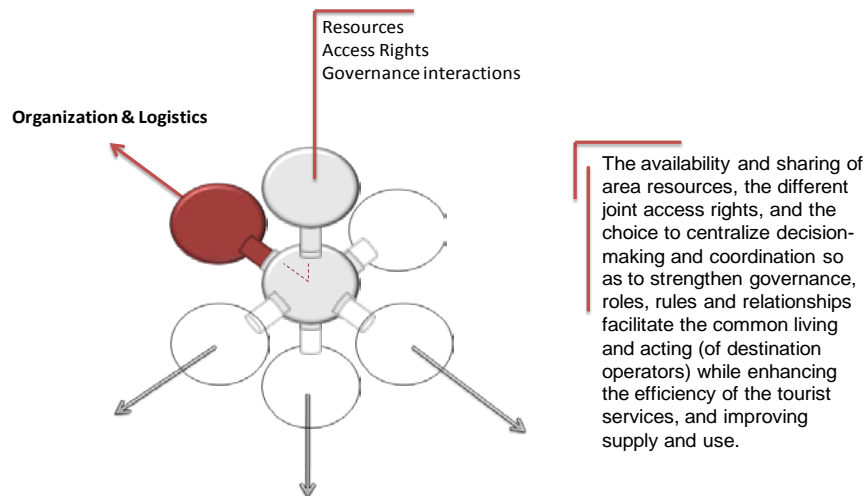


Figure 7. Tourism organization & logistics. Source: Authors' elaboration.

### A New Way to Share Risks in Tourism

It has been clear for a long time now that the use of a reticular approach (SSMED FC 9—networks) promotes the work of tourism operators and allows them to work as enablers of business initiatives, geared toward compatible and convergent goals, certainly more satisfying than single and short term projects. In fact, the risk and uncertainty sharing stimulates collective action and interest that benefit the entire region (see Figure 8). Today, this widespread attitude, sometimes originated by necessity (given the unavailability or lack of certain resources), or by strategic value (regarding the obtainable market share advantages) leading to the territorial bargaining power that all organizations involved (SSMED FC 2—entities) may benefit from that.

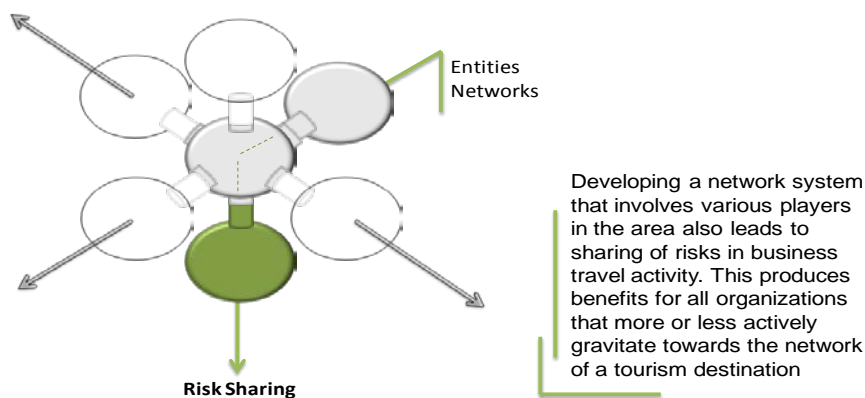


Figure 8. Risk sharing in tourism. Source: Authors' elaboration.

### New Variables for Destination Global Efficiency

Often, destination performance is evaluated in terms of tourism flows, perceived product quality, employment rate in the hospitality sector, catering, transportation, and price ranges. Increasingly, we have to quantify the tangible and verifiable performance for specific regions (SSMED FC 8—measures) in order to appreciate the advantages of the location attractions, competitiveness (compared with similar places), new solutions adopted, convenience, interactivity, and, above all, varieties. The competitiveness of sustainable development is connected to the ability to cooperate, raise the service quality offered and involve every organization with a win-win logic (SSMED FC 6—outcomes) that in a nutshell can be summarized in terms of

efficiency, as seen in the figure below (see Figure 9).

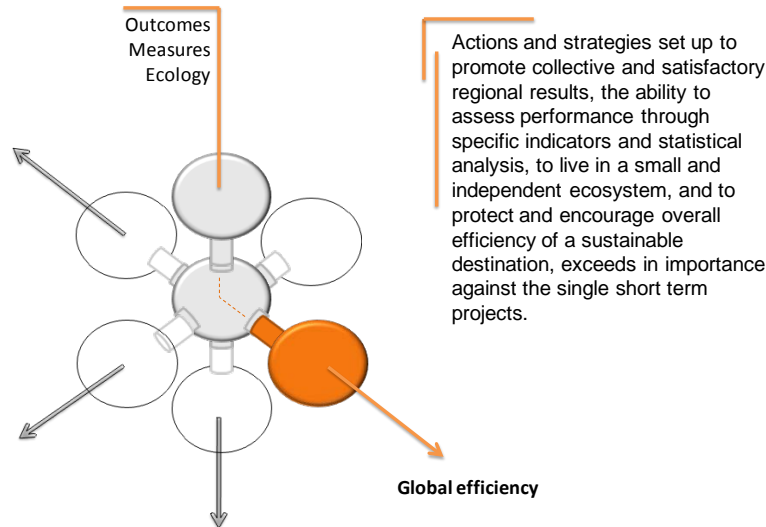


Figure 9. Destination global efficiency. Source: Authors' elaboration.

In short, the SSMED FCs seems to be able to interpret, support, facilitate, or even promote successful strategies for a tourism destination today. This is possible thanks to the collaboration among different categories of operators, the integration of services provided, the high level of quality reached in support of the interests of numerous actors who populate this particular eco-system (SSMED FC 10—ecology).

### Theoretical Findings

Up to now, we have witnessed a significant rise of average indexes considered compliant to new service management models for tourism. Either intentionally or not at all, principal leverages for tourism destination development are strongly derive from service logics, and business managers at any level join a different way to relate with the other actors participants (Alter, 2008) of the destination systems. Observing the attitudes and the strategies inside specific geographical areas, we note the validity of many SSMED principles as practical interpretations of basic concepts deriving from service systems theories.

Indeed, we see that nowadays destination management involves a range of activities, such as:

(1) Analyzing and monitoring the ability of a destination:

- Developing and managing tourism effectively;
- Providing a satisfying experience for visitors;
- Managing tourism in a sustainable manner from an economic, cultural, environmental, and political standpoint.

(2) Providing standard operation for a useful benchmark.

(3) Increasing tourism awareness as an essential component for growth and social welfare.

With the design and promotion of a geographical logo or an official web-site, it is possible to achieve a promising diffusion and communication for information and promotion. If we look at the presence of access connections, we recall the relevance of the public system structure for sustainability. Comparing the strategies of ticket packages, discounts, etc. we can verify how synergic collaboration and resource sharing among network actors are useful to a destination system.

Finally, the presence of high level government actions (as network hubs) is a necessary condition to

trigger processes of sustainable development within fragmented contexts such as for tourism. In particular, this analysis suggests that some conditions for the success of top government strategies are referable to:

- the presence in a deliberate strategy to be implemented;
- the actors involved in destination government;
- the resources focused on relevant initiatives and consistent with the heritage of attractive destinations.

In short, some SSMED principles may be linked to key elements for the success of a tourist destination. We know that the relationship existing between case study data detections and the service science foundational concepts mentioned above is not strict, but in this context, it may be possible to identify several main conceptual connections. Following SSMED foundations, we stress the usefulness to:

- Create an identity for the congress industries;
- Expand the knowledge of the benefits that flow from it;
- Increase and valorize territorial influence;
- Support activities to achieve global objectives.

### Final Remarks and Future Works

Service sciences can stimulate destination strategies, improve and facilitate the collaboration among different categories of operators offering tourism services. This way, it is possible to ensure integration and high quality, managing different services together. In tourism destinations, the fundamental conditions are: the achieved mechanisms of co-production; resource sharings; collaborative strategies; a universal image for communications and marketing; network policies and operations; and the service logics. All of which are consciously, or not, globally perceived or pursuing specific final goals.

In essence, tourism logics reviewed under the SSMED principles could better explain the elements fostering destination competitiveness, how to promote the overall welfare of resorts and finally delineate the real leverages for sustainable development of destination systems.

### References

- Aguiari, R., & Di Nauta, P. (2011). Governing business dynamics in complex contexts. In *the 2011 Naples Forum on Service: Service Science, S-D logic and network theory*. Napoli: Giannini.
- Allee, V. (2000). Reconfiguring the value network. *Journal of Business Strategy*, 4, 36-41.
- Alter, S. (2008). Service system fundamentals: Work system, value chain, and life cycle. *IBM Systems Journal*, 47(1), 71-85.
- Ballantyne, D., & Varey, R. J. (2006). Creating value-in-use through marketing interaction: The exchange logic of relating, communicating and knowing. *Marketing Theory*, 6(3), 335-348.
- Barabási, A. L. (2002). *Linked: The new science of networks*. Cambridge: Perseus.
- Barile, S. (2009). *Management sistemico vitale*. Torino: Giappichelli.
- Barile, S., & Di Nauta, P. (2011). Viable system approach for territory development, in contribution to theoretical and practical advances in management. *A Viable Systems Approach (vSa)—ASVSA, 1*, 199-243.
- Barile, S., & Polese, F. (2009). Service dominant logic and service science: A contribution deriving from network theories. In E. Gummesson, C. Mele, & F. Polese (Eds), *The 2009 Naples Forum on Service: Service Science, S-D logic and Network Theory*. Napoli: Giannini.
- Barile, S., & Polese, F. (2010). Smart service systems and viable service systems: Applying system theory to service science. *Service Science*, 2(1/2), 21-40.
- Barney, J. B., & Hesterly, W. S. (2005). *Strategic management and competitive advantage: Concepts*. New Jersey: Pearson Education, Inc., Upper Saddle River.
- Bartlett, C. A., & Ghoshal, S. (1990). The multinational corporation as an inter-organizational network. *Academy of Management Review*, 15(4), 603-625.



- Basole, R. C., & Rouse, W. B. (2008). Complexity of service value networks: Conceptualization and empirical investigation. *IBM Systems Journal*, 47(1), 53-70.
- Buhalis, D. (2000). Marketing the competitive destination of the future. *Tourism Management*, 21(1), 97-116.
- Caroli, M. G. (1999). *Il marketing territoriale*. Milano: Franco Angeli.
- Casarin, F. (1996). *Il marketing dei prodotti turistici, specificità e varietà*. Torino: Giappichelli.
- Castells, M. (1996). *The rise of the network society*. Oxford, UK: Blackwells.
- Crouch, G. I. (1992). Effect on income and price on international tourism demand. *Annals on Tourism Research*, 19, 643-664.
- Crouch, G. I. (1996). Demand elasticities in international marketing: A meta-analytical application to tourism. *Journal of Business Research*, 36, 117-136.
- de Araujo, L. M., & Bramwell, B. (2002). Partnership and regional tourism in Brazil. *Annals of Tourism Research*, 29(4), 1138-1164.
- Della Corte, V. (2000). *La gestione dei sistemi locali di offerta turistica*. Padova: Cedam.
- Demirkan, H., Spohrer, J., & Krishna, V. (Eds.) (2011a). *Service systems implementation*. New York: Springer.
- Demirkan, H., Spohrer, J., & Krishna, V. (Eds.) (2011b). *The science of service systems*. New York: Springer.
- Echtner, C. M., & Prasad, P. (2003). The context of third world tourism marketing. *Annals of Tourism Research*, 30, 660-682.
- Godfrey, K., & Clarke, J. (2002). *Manuale di marketing territoriale per il Turismo*. Firenze: Le Monnier.
- Golinelli, C. M., & Simoni, M. (2005). La relazione tra le scelte di consumo del turista e la creazione di valore per il territorio. *Sinergie*, 66, 237-257.
- Golinelli, G. M. (2009). Business management: A viable system approach, forthcoming.
- Golinelli, G. M. (2010). *Viable systems approach—Governing business dynamics*. Padova: Kluwer/CEDAM.
- Granovetter, M. (1985). Economic action and social structure: The problem of embeddedness. *American Journal of Sociology*, 91(3), pp.481-510.
- Grönroos, C. (2000). Service management and marketing: A customer relationship approach. West Sussex: John Wiley Sons.
- Gulati, R. (1998). Alliances and networks. *Strategic Management Journal*, 19, 293-317.
- Gummesson, E. (1993). *Quality management in service organization*. New York: International Service Quality Association.
- Gummesson, E. (1999). *Total relationship marketing*. Oxford: Butterworth Heinemann.
- Hakansson, H., & Snehota, I. (1995). *Developing relationship in business network*. London: Routledge.
- Katzan, H. (2008). Foundations of service science concepts and facilities. *Journal of Service Science*, 1(1), 1-22.
- Kotler, P., Bowen, J., & Makens, J. (2009). *Marketing del turismo* (V ed.). Milano: Mc Graw-Hill.
- Levitt, T. (1981). Marketing intangible products and products intangibles. *Harvard Business Review*, 59, 94-102.
- Lovelock, C., & Gummesson, E. (2004). Whither services marketing? In search of a new paradigm and fresh perspectives. *Journal of Service Research*, 7, 20-41.
- Lusch, R. F., Vargo, S. L., & O'Brien, M. (2007). Competing through service: Insights from service-dominant logic. *Journal of Retailing*, 83, 5-18.
- Lusch, R. F., Vargo, S. L., & Tanniru, M. (2010). Service, value networks and learning. *Journal of the Academy of Marketing Science*, 28, 19-31.
- Maglio, P. P., & Spohrer, J. (2008a). Fundamentals of service science. *Journal of the Academy of Marketing Science*, 36(1), 18-20.
- Maglio, P. P., & Spohrer, J. (Eds.) (2008b). Special issue on service science, management, and engineering. *IBM Systems Journal*, 47(1), 129-142.
- Maglio, P. P., Kieliszewski, C. A., & Spohrer, J. C. (2010). *Handbook of service science*. New York: Springer.
- Maglio, P. P., Srinivasan, S., Kreulen, J. T., & Spohrer, J. (2006). Service systems, service scientists, SSME, and innovation. *Communications of the ACM*, 49, 81-85.
- Martini, U. (2005). *Management dei sistemi territoriali: Gestione e marketing delle destinazioni Turistiche*. Torino: Giappichelli Editore.
- Mele, C., & Polese, F. (2011). Key dimensions of service systems: Interaction in social & technological networks to foster value co-creation. In H. Demirkan, J. Spohrer, & V. Krishna (Eds.), *The Science of Service Systems* (pp. 37-59).
- Mele, C., Pels, J., & Polese, F. (2010). A brief review of systems theories and their managerial applications. *Service Science*, 2(1/2), 126-135.
- Ng, I., Badinelli, R., Polese, F., Di Nauta, P., Löbner, H., & Halliday, S. (2012 forthcoming). S-D logic research directions and opportunities: The perspective of systems, complexity and engineering. *Marketing Theory*.
- Pearce, D. (1992). *Tourist organizations*. Harlow: Longman Group UK Ltd..

- Pechlaner, H., & Weiermaier, K. (2000). *Destination management: Fondamenti di marketing e gestione delle destinazioni turistiche*. Milano: Touring Editore.
- Pencarelli, T. (2003). *Lecture di economia e management delle organizzazioni turistiche*. Udine: Edizioni Goliardiche.
- Pine, B. J., & Gilmore, J. H. (2000). *L'economia della esperienze*. Milano: Etas.
- Polese, F. (2009). Local government and networking trends supporting sustainable tourism: some empirical evidences. In L. Fusco Girard, & P. Nijkamp (Eds.), *Cultural Tourism and Sustainable Local Development* (pp. 131-148). London: Ashgate.
- Polese, F., & Carrubbo, L. (2008). Service dominant logic and its application on tourism phenomena. *Impresa Ambiente e Management*, II(1), 5-36.
- Polese, F., & Di Nauta, P. (2012 forthcoming). A viable systems approach to relationship management in S-D logic and service science. *Journal of Business Administration Review*, 73(2), Schäffer-Poeschel.
- Polese, F., & Minguzzi, A. (2009). Networking approaches for sustainable destination management: An italian case study. In M. Kozac, L. Andreu, & J. Knoth (Eds.), *Advances in Tourism Marketing, Managing Networks* (pp. 113-124). London: Routledge.
- Polese, F., Carrubbo, L., & Russo, G. (2010). Managing business relationships, between service culture and viable systems approach. *Esperienze di Impresa*, 2(2009), 135-158.
- Polese, F., Pels, J., & Brodie, R. (2011). Theatrical underpinning to successful value co-creation. In E. Gummesson, C. Mele, & F. Polese (Eds.), *Service-Dominant Logic, Network & Systems Theory and Service Science*. Napoli: Giannini.
- Porter, M. E. (1980). *Competitive strategy: Techniques for analyzing industries and competitors*. New York: The Free Press.
- Porter, M. E. (1998). *The competitive advantage of nations (with a new foreword)*. New York: The Free Press.
- Prahalad, C. K., & Ramaswamy, V. (2004). *The future of competition: Co-creating unique value with customers*. Cambridge, M.A.: Harvard University Press.
- Qiu, R. G. (2009). Computational thinking of service systems: Dynamics and adaptiveness modeling. *Service Science*, 1(1), 42-55.
- Rispoli, M., & Tamma, M. (1992). Beni e servizi, cioè prodotti. *Sinergie*, 29, 95-115.
- Ritchie, J. R. B., & Crouch, G. I. (2003). *The competitive destination: A sustainable tourism perspective*. Wallingford: CABI Publishing.
- Rust, R. K. (2004). A call for a wider range of services research. *Journal of Service Research*, 6(3), 2-11.
- Saviano, M., & Berardi, M. (2009). Decision making under complexity: The case of SME. In V. Vrontis, Y. Weber, R. Kaufmann, & Tarba, S. (Eds.), *Managerial and Entrepreneurial Developments in the Mediterranean Area* (pp. 1439-1463). Proceedings from the 2nd Annual Euromed Conference Readings Book.
- Saviano, M., Bassano, C., & Calabrese, M. (2010). A VSA-SS approach to healthcare service systems, the triple target of efficiency, effectiveness and sustainability. *Service Science*, 2(1/2), 41-61.
- Sheth, J., & Parvatiyar, A. (2000). Relationship marketing in consumer markets: Antecedents and consequences. *Handbook of Relationship Marketing* (pp. 171-208). Sage Publications, Thousand Oaks.
- Smith, S. L. J. (1994). The tourism product. *Annals of tourism research*, 21(3), 382-395.
- Spohrer, J., Anderson, L., Pass, N., & Ager, T. (2008). Service science e service dominant logic. *Otago Forum*, 2, 4-18.
- Spohrer, J., Maglio, P. P., Bailey, J., & Gruhl, D. (2007). Steps toward a science of service systems. *Computer*, 40(1), 71-77.
- Spohrer, J., Vargo, S. L., Maglio, P. P., & Caswell, N. (2008). *The service system is the basic abstraction of service science*. HICSS Conference.
- Vargo, S. L., & Lusch, R. F. (2008). Service-Dominant logic: Continuing the evolution. *Journal of the Academy of Marketing Science*, 36(1), 1-10.
- Vargo, S. L., & Morgan, F. W. (2005). Services in society and academic thought: An historical analysis. *Journal of Macromarketing*, 25(1), 42-53.
- Vargo, S. L., Maglio, P. P., & Akaka, M. A. (2008). On value and value co-creation: A service systems and service logic perspective. *European Management Journal*, 26(3), 145-152.
- Vellas, F., & Becherel, L. (1999). *The international marketing of travel and tourism*. London: Macmillan Press Ltd..
- Vesci, M., & Hysa, X. H. (2011). *An integrated conceptual framework for territorial governance*. The 2011 Naples Forum on Service: Service Science, S-D logic and Network Theory. Napoli: Giannini.
- Woodruff, R. B. (1997). Customer value: The next source for competitive advantage. *Journal of the Academy of Marketing Science*, 25, 139-153.