GOVERNING BUSINESS DYNAMICS IN COMPLEX CONTEXTS

The role of networks, interaction and relationships

ABSTRACT

Purpose – The paper is to highlight the peculiarities of Service Science, Management and Engineering (SSME) and its proposals with reference to network and systems theories, such as the Many-to-Many, and the Viable Systems Approach (*vSa*).

Methodology/approach – Conceptual analysis based on new developments in SSME, Many-to-Many and (*vSa*), dealing with the thesis that these scientific proposals are coherent and complementary, and that theories can benefit one from the other when comparing their principles and scientific proposals.

Findings – Many-to-Many logic and SSME are theories grounded on networks, value co-creation and systems. Also (*vSa*), a grand theory and interdisciplinary approach is grounded on systems thinking and resource-based theory. Considering its broad view, with inferences from biology, sociology and mechanics, it represents an interpretative lens for complex phenomena. In this direction, (*vSa*) seems to be suitable for analysing service systems being its capacity to move from holism to reductionism, respecting the single characteristics of each entity of the context. Many-to-Many and SSME are focused on the comprehension of Service in general, which can be represented by a complex systems dynamic, in which value is created and exchanged in terms of service among multiple entities. According to (*vSa*), every system, in order to be *viable*, always governs its relations among supra-systems and sub-systems, looking for harmonic behaviour (*consonance*) that aims at survival and development, by satisfying supra-systems expectations and rewarding sub-systems. In this direction, (*vSa*) can contribute to improve and develop these disciplines.

Research implications – SSME and Many-to-Many are gradually being integrated. The research implies that the network theories, and specifically (*vSa*), could considerably support this integration by contributing with its own scientific proposals. In brief, we believe that the (*vSa*)'s view on business purposes, value creation and the management of relations are strongly coherent with the view proposed or tacitly implied by SSME and Many-to-Many approach.

Practical implications – The academic audience is encouraged to critically analyse network and systems theories, and in particular the (*vSa*) proposal and theories, in order to verify the possibilities and ways it could contribute to scientific advancements in Service Science and Many-to-Many. To a practitioner audience, it offers ideas for the enhancement of government business dynamics through the awareness of network and systems approach.

Originality/value – Many contributions have focused on the SSME and Many-to-Many logic, highlighting the significant integration between the two scientific proposals. This paper is written with the intention to give a further contribution and broaden the perspective of network and systems theories, introducing possible further inferences by virtue of (*vSa*).

Key words – Service, Consonance, Resonance, Relevance, Governance, Complexity.

Paper type – Research paper/conceptual paper.

1. Introduction

The business world is more and more interested in research evolution concerning complexity, as a result of the assumption that to deal with new situations, and to survive in today's dynamic context, previous interpretation schemes, based on predefined and standardized solutions, are often inadequate. In fact, management, always focused on the adoption of models, techniques and tools, has finally considered the fact that there is always an optimal solution for a specific problem. So, it has researched endowment of technical tools found within interpretation schemes, used in different situations (Aguiari, 2002; Barile, 2009a).

Management tends to adopt structured or semi-structured models to facilitate decision making, due to the growing dynamism within contexts, and the consequent continuous increase of variety. However, it has ended up dealing with situations of governance *problem-solving*, fundamental for the survival of a company, and actually related to the realm of *decision making*. In this direction, researchers observed this kind of evolution, recognizing the importance of broadening the horizon when approaching governance. In fact, if on the one hand, they identified a no longer stable and predictable environment, on the other hand, they witnessed a rush towards a rational decision making approach to business. In the business world, decision makers are often overly stressed with the responsibility to govern evolutionary dynamics of business systems, and the mission to define relevant choices to guarantee survival. In fact, the technical and evermore quantitative approach to *problem solving* is not suitable to catch the subtle qualitative aspects identified within a decision making context, where it is not essential to solve problems, but rather to make choices, often without any supporting infotmation (Barile, 2009a). In such a scenario, phenomena are often generated proving incapability or embarassment when possible solutions are identified. As a consequence, such solutions are identified, as complex. However, is it correct to consider the phenomenon in itself as complex? And how can we explain the way that the same phenomenon can be perceived as complex by several subjects? What are the characteristics that allow to apply the attribute "complex"?

Such questions have led recent reflections of systemic thought applied to business and social economics that, starting from the assumptions on the interpretation of a business as a *viable system*, have proposed a systemic approach methodology, as a perspective from which to extract new interpretation schemes for governance in complex contexts, the *Viable Systems Approach* (*VSA*) (Golinelli, 2000, 2002, 2005, 2008, 2010, 2011; Barile, 2008, 2009a). Then, decision making assumes new challenges for governing bodies, businessmen or managers in conditions of increasing complexity. But when these assumptions occur, the endowment of synthetic schemes will be exclusively adequate to deal with complications, but not with complexity.

Following, in this paper, there is an interpretation of complexity from a *viable* systemic point of view, that underlines the relevant emerging aspects in light of the perspective change that occurs by adopting a systemic approach and attempting to link it with the *service paradigm* and the *many-to-many* logic (Gummesson, 2004, 2006, 2008a, 2009).

Theoretically, there are several potential connections among the more prominent approaches to services research – Service Science (SSME), Many to Many and Systems theories. The present study analyses the approach to management of relations and decision making in the mentioned approaches, trying to synthetise and provide common methodological frameworks for the government of business dynamics. In particular, the intrinsically *relational* nature of both S-D logic (Lusch et al., 2007; Vergo and Lusch, 2008, Vargo et al., 2006) and SSME (Sphorer et al., 2007, 2008a, 2008b; Maglio et al., 2006, 2008a, 2008b; Katzan, 2008) provides common ground for such synthesis, and the (*VSA*) provides some very interesting (and potentially useful) insights into the management of relations. Therefore, the paper develops a conceptual analysis based on recent developments in the study of relations management, to propose a theoretical model where disciplines can converge.

The remaining part of the paper respectively covers: some relevant aspects of emerging theories on service and systems; an explanation of the nature and basic principles of (*VSA*) focusing on government of relations and decision making; a summary of the most important findings.

2. Government and management of relations in emerging Service theories

S-D logic is a theoretical proposal. It was originally focused on marketing, then generalized to explain markets, general management, economics and society in general. It highlights the shift from a goods-dominant (G-D) logic to a service-dominant (S-D) logic. It is founded on the co-creation of value and service and resource integration based on interaction and networked relations (Vargo and Lusch, 2006; 2008). For marketing, Vargo and Lusch offer a new perspective by introducing the dominance of service over products and goods, thus adapting to today's competitive context of a service economy (Levitt, 1981; Grönroos, 2000, 2008; Normann, 1997; Rust, 2004). S-D logic is based on ten foundational premises that explain that service should be understood as an application of skills through activities, processes and performances designed to produce benefits for suppliers and customers and for all third parties that are directly or indirectly involved in a network of relations (Vargo and Lusch, 2008). According to Vargo and Lusch goods are no longer the only transaction objects, but they appear as an appliance for service provision. Services are seen as the real protagonists of interactions and transactions. Further, service no longer represents a part of an asset or the intangible side of goods; it is the service to be really exchanged (Vargo and Lusch, 2006).

SSME, an IBM initiative, today, involves researchers of several higher education institutions worldwide, in the attempt to promote service science as a new discipline, and to elevate the study of service systems, so as to become a research and education priority. It is a multidisciplinary study, an open source project, based on the pillars of computer science, industrial engineering, all management disciplines of business strategy, marketing, organization and so on, as well as social sciences and humanities, cognitive studies and legal sciences. SSME analyses the existence of service systems, what they are, and how they evolve, the roles of people, knowledge, shared information and technology, and definitely, the role of customers on the demand side, and production processes on the supply side. In terms of management, it investigates the improvement of efficiency and its evaluation, relation sustainability, and systems relations. In terms of engineering, it develops new technologies and adequate approaches to improve information processing, measurement, and the diffusion of information. Service science is emerging as a unique field aiming at discovering the underlying logic of complex service systems (Sphorer et al., 2007, 2008a, 2008b; Ng et al.).

3. Government and management of relations in emerging network and systems theories

Literature offers a wide perspective of several disciplines dealing with network and thinking systems, and their application to interpret both everyday life and business realities. This is true in social, natural, and computer sciences. In general, network and systems theory have, in their founding concepts, the knowledge of complexity, and they try to introduce adequate approaches to survive in such contexts. It is an umbrella methodology that can be applied on many levels of research (Polese and Di Nauta, 2010).

Networks and relations were emphasised in the 1970s, when studies of economy in general, business-to-business and marketing specifically recorded an increase of connections among firms as a result of information exchange, continuity in relations, and greater importance of commitment, trust, and collaboration (Richardson, 1972; Håkansson and Östberg, 1975). Various terms have been used to describe these voluntary ties among firms and other economic actors, including "hierarchy" (Hedlund, 1986) and "polycentric structure"' (Forsgren et al., 1991). The concept of network has, now, become generally accepted to describe and analyse the nature of emerging economic entities (Bartlett and Ghoshal, 1990).

Studies of the genesis of networks have identified two basic mechanisms: (i) enterprises, involved in a common production process, decide to combine their competencies and other resources; (ii) a leader enterprise attracts other businesses to join its activities. On this point, several authors have taken a particular interest in the so-called "strategic network approach", primarily in

the creation and management of intentionally-formed network organizations featuring a specific set of actors (Normann and Ramirez, 1994).

Several approaches have intensified the structure and function of networks. Some have analysed networks in terms of organisational forms, including nodes, connections, and aggregating forces and net-based organizational formats (Richardson, 1972; Hedlund, 1986; Bartlet and Goshal, 1990). Others have focused on the management of networks, closely analysing issues such as autonomous nodes, central control, dynamic equilibrium, and structural variability management (Burt, 1992). Still others have examined network strategies, such as resource sharing and common goal achievement (Jarrillo, 1988) in the attempt to evaluate networking and social relationships for competitiveness reinforcement (Polese, 2009a, 2009b).

The past decades have proved that marketing relations, CRM and one-to-one marketing have often failed in practice. The major reason for failure is the narrow focus on the dyadic relation between a single supplier and a single customer (Gummesson, 2004). Many-to-many marketing means a transition from the two-party relation approach to a multi-party network approach. No one is isolated, whether an individual or a business (Håkansson and Snehota, 1995). We all live in an interconnected world, in which actors cannot elude network connections and strategies that capture the power and usefulness of these relations (Castells, 1996; Capra, 1997, 2002). The three key variables of marketing remain relations, networks and interaction (Gummesson, 2004). The many-to-many approach has extended the notion of value creation to include interactions between networks of providers and communities of customers (Gummesson, 2008a). Perhaps, the next, more radical step is to exchange the CEO with a NEO, network executive officer (Gummesson, 2004b).

4. *Viable Systems Approach* **and its roots in systems thinking**

(*vSA*) is based on a general systems theory, more specifically, on social analysis which interprets business behaviour within a dense pattern of interactions. The firm is conceived as a *viable system*, a part of a context of other *viable systems* and single components (Polese and Di Nauta, 2010).

As a systemic theory, (*vSA*) proposes a methodology for interpreting the contemporary business arena, and the approach to government and management. Actually, (*vSA*) proposals for a new behavioural approach to business and relational interactions in complex contexts, show the usefulness in the everyday decision-making processes, both for organizations and individuals. It contributes to theory by proposing (Polese and Di Nauta, 2010).

The concept of the firm as a system is not new to economics as a discipline. The most relevant literature is from 1950s, with the von Bertalanffy school, which rejected the idea that a certain phenomenon could be understood exclusively through an analytical, reductionistic approach.

(*vSA*), more specifically, has considered a relational approach for corporate management (Golinelli, 2000, 2005, 2009; Barile, 2006, 2008a, 2009), confirming the theories of von Bertalanffy (1956) about the enterprise as an open system.

Other references on which (*vSA*) founds its theory are in Parsons (1965), Ashby (1971), Luhmann (1990) and Beer (1991).

5. (*vSA*) **contribution to the government of business dynamics and to relational aspects of Many-to-Many, S-D logic and SSME**
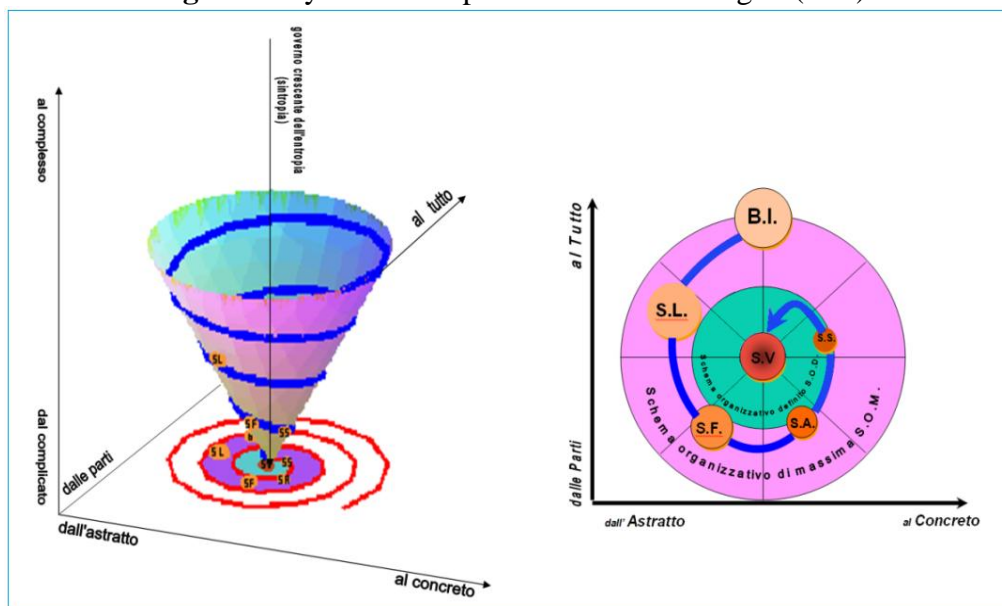
One of the most interesting contributions (*vSA*) can given to the debate on relations/interactions dynamics concerns the attention decision makers should pay to identify, interpret and classify actors in the contexts, especially those (individuals or organizations) that own important resources for the observer. This is an unavoidable process in a context for each actor, in order to rescue fundamental resources for survival or improvement. Then, each actor makes a decision focusing on the integration of resources identified in the context as belonging or owned by other actors. These intricate relations created by decision makers transcend the boundaries of the entity acting as a resource integrator (Di Nauta, 2010).

In this direction (*VSA*) introduces the two concepts of *consonance* and *resonance* to describe the achievement of a harmonic and sustainable (*viable*) behavior (Polese and Di Nauta, 2010):

▪ *Consonance* is the compatibility among the actors of a system, and represents potential harmonic relations (static vision).
▪ *Resonance* is the actual and executed harmonic interaction (dynamic vision).

Interpreting the profound meaning of *consonance* and *resonance*, (*VSA*) infers interesting contributions to emerging service theories, by virtue of the structure/system dichotomy, in the attempt to be holistic and simultaneously reductionistic. Then, structure refers to the static, a reductionistic view of the observed reality of components and relations, and on how the observed phenomena are constituted. System refers to the dynamics of evolution, a holistic view of observed behaviour of the observed phenomena to enable interpretation of interactions (Polese and Di Nauta, 2010).
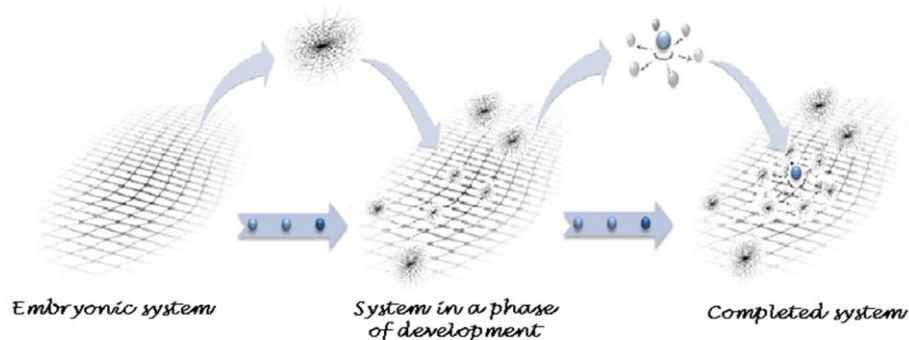
Figure 1: System conceptual matrix according to (*VSA*)

Source: Barile, 2011; www.asvsa.com

Another interesting contribution to (*VSA*) government and management of relations in business is connected to the system development scheme, as illustrated above:

Figure 2: System development according to (*VSA*)

Source: Barile, 2009b; www.asvsa.com

Figure 2 essentially shows how a developing system has various abilities and capacities, which are then gradually enhanced by participation in an higher-order system, or network. As they progress through this development process, systems are considered as 'completed' – that is, demonstrating *viable* traits for sustained competitiveness – only when they have developed effective positive interactions (classifiable as 'consonant' and 'resonant' relations).

Applying such (*VSA*) insights to management of relations in business, the primary player to consider is, of course, the customer (Normann and Ramirez, 1994; Ravald and Grönroos, 1996; Grönroos, 1997). However, although customers are the most important external entities in value creation, they are not the only ones. On this point, Gummesson (2008b) has introduced the concept of balanced centricity in an attempt to reduce what he perceived to be an over-emphasis on customer orientation.

In order to ensure appropriate recognition of the role of other entities and interested parties in value creation, Gummesson (2008) also commended a many-to-many approach, which extends the notion of value creation to include interactions among networks of providers and communities of customers. According to this view, value is created by value propositions and value actualisation within: (i) business-to-business relations; (ii) customer-to-customer relations; and (iii) interactions between businesses and customers (Gummesson, 2008a; Gummesson and Polese, 2009).

6. The (*VSA*) theoretical contribution to the *service paradigm*

The *service paradigm* debate finds useful reflection in (*VSA*), as the (*VSA*) theoretical proposals are based on the governance and management of relations. Actually, the interesting contributions by (*VSA*) are connected to the ability of a system that fosters the management of relations through enterprise dynamic satisfactory evolutions (Polese and Di Nauta, 2010). Clearly, in line with the concept of value co-creation introduced by S-D logic (Lusch et al., 2007; Vargo et. al., 2008b), it is a process in which all the actors need to be satisfied in a win-win interaction. However, value co-creation takes place within dynamic interactions among many actors, and represents a challenging status to be accomplished by decision makers in today business arena. Despite the acknowledge importance of relations, and their governance, neither S-D logic nor SSME examined closely how to manage these relations for every actors' benefit and success (*consonance*), or how to dynamically carry out such studies considering the ever changing conditions of service exchange (Polese and Di Nauta, 2010).

In this dynamic interaction, (*VSA*) provides a methodology to the design and management of positive interactions (dynamic relations) among entities. Each decision maker (business, individuals, governing bodies, and so on), driven by the will to be appreciated for the result of the decision made, needs to consider dynamic models. Such models are based on multi-criteria decision support systems that aim at reaching satisfactory conditions for the involved decision makers, in search of a continuous feedback to production processes, in order to align their traits to actors' need. Isn't this co-design, co-production, co-creation? This is what (*VSA*) suggests to introduce in business behaviour in search of consonant and resonant interactions among systemic actors (Polese and Di Nauta, 2010).

(*VSA*) proposes an approach for the governance and management of relations among actors, and can contribute to the *service paradigm* approach by introducing a methodology useful to select and hierarchically order all possible resource owners, actors of S-D logic value co-creation processes. In fact, according to (*VSA*), organizations *apply* competences and integrate the *applied* competences with other resources determining benefits (value co-creation), thus highlighting the importance of these interactions for all involved entities. For this reason, it defines a conceptual scheme (Figure 3) focused on classifying the external supra-systems and establishing a qualitative method to measure the system capability for a satisfactory behaviour (Barile and Polese, 2009).

In other words, the relation between service providers and service clients may be integrated by a methodology that aims at contributing to the qualification of these relations, both from a design

point of view (designing service systems requires the preventive qualification of relations among public and private bodies, organizations, individuals) and from a government and management point of view (in order to reach a diffuse satisfactory behaviour, capable of promoting network value co-creation).

As above mentioned, the enterprise, as a *viable system*, needs to identify and classify relevant entities within its context, in order to establish positive and harmonic interactions promoting sustainable behaviour. The identification and classification of such observed entities affects the *viability* of every system, since *relevance* constitutes the primary differentiating characteristic for the entities that are part of the *viable system*'s context. The *relevance* of external/other entities can be determined through two attributes: the influence exercised by the entity on the system, and the relation criticality.

Thus, we have an initial distinction between "high *relevance*" systems and "low *relevance*" systems. The former, subsequently recognised as supra-systems, are influential and, at the same time, bearers of a crucial resource. The latter, though capable of stressing pressure on established relations, are not exclusive bearers of a crucial resource. Further specifications mark the entities as high *relevance* and low *relevance*, taking into consideration the constraints or the rules suitable to the systems over which they exert influence, and the type of relations and interactions that can occur among systems which come into contact (Golinelli, 2000, 2002, 2005, 2008, 2010, 2011).

According to this approach, the *viable system* focuses on a fundamental distinguishing feature for the analysis of systems of the context: *relevance* can then be interpreted as the ability of an outside system to condition the survival prospects of a *viable system*. If *relevance* is understood as a distinguishing feature of the entities, it can refer to two separate attributes (Figure 3):

- the relationship criticality: the nature of the resource constitutes a basic attribute to establish the attention degree government must pay to assess the importance of interactions and, therefore, to establish whether specific relations should be maintained or implemented, thus shifting from a state of *consonance* to a state of *resonance*;
- the influence of the system on methods of use, acquisition and re-appropriation of resources, regardless of the relation criticality within, or conferred by, the system. Government is also responsible for assessing and measuring the degree of influence the system can exert in placing limits or indicating rules and regulations in the enterprise.

Figure 3: A possible *relevance* analysis model
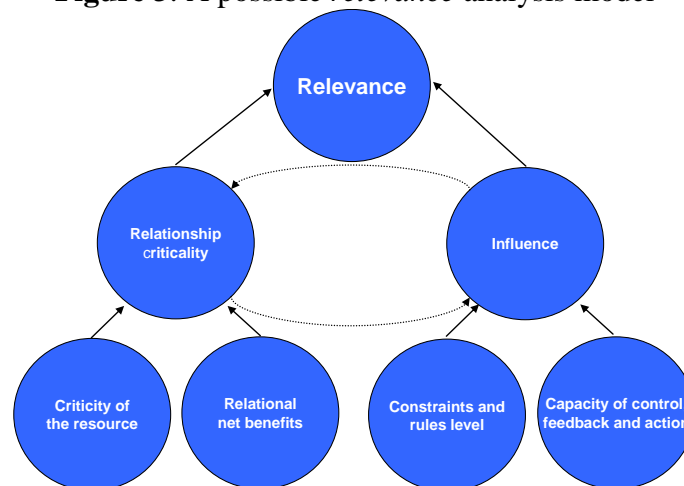
Source: Golinelli, 2010

The resource criticality and influence attributes can be illustrated by means of two nominal scales which indicate values of high and low relations criticality and high and low influence. The combination of such attributes results in the construction of a conceptual scheme, whose elements provide interesting insights regarding actions government might well undertake in order to guarantee the survival of the enterprise in its specific context.

To analyse the *relevance* of the various system entities in the context, individual resources must be identified and detailed. We can then outline a rough pattern based on the description of the relation existing between the various resources.

This way, the business resources details can be mapped, and the different systems from which they originate can be identified. On the basis of this knowledge, we can analyse the specific characteristics that define the attributes we have called resource criticality and influence exerted, or which may be exerted, by the various systems.

7. A proposal for *decision making* in complex contexts: the (*VSA*) *ConsulCube*

A complete orientation to strategic or operation problem-solving can be provided through a methodological procedure. In the last decades research has moved towards a standardization of elaborated procedures, and the improvement and deepening of technical know-how. In a certain sense it has hardly paid attention to some significant know-how skills that a governing body, or a decision maker in general, should own: how to define the context of reference; how to identify relevant supra-systems; how to achieve a successful solution in a consonant context. Such skills are relevant because, in complex situations, solutions which apparently seem to be excellent, risk to be unachievable due to a lack of *consonance* (Barile, 2009a, 2009b).

In this direction, the (*VSA*) proposal a regeneration of the decision making approach should take into considerations:

- the possibility to measure and evaluate the points of view and the opinions of all participants in the decision making process;
- the specific characteristics of context;
- the adaptation to different requirements and cultural contexts;
- the knowledge achievement concerning any specific area, trying to get more accurate value of client satisfaction (*consonance*);
- the understanding of the *relevance* of interactions with components identified in the context, participating in the emergence of the system

A synthesis model has been proposed by Barile (2009b) with the (*VSA*) *ConsulCube*, which allows to dynamically draw the context of reference, identifying relevant supra-systems and the decision able to satisfy their expectations on the basis of the *context consonance* criteria. It is an effective model in analysis, used to qualify and measure various connections, relations and interactions existing in a single *viable system* and in the dynamics between several systems, based on recursion.

The modeling of decisions can be represented through a three-dimensional space (Figure 4), which emphasizes the 'big picture' of information variety dimensions and the *relevance* of the action, making measurable: the relevant variables, determining the paths of *consonance*; the different perspectives of observation that potential solutions must match; the contributions of different actors to the achievement of the objectives; a value estimate that can be created by the different project ideas, in which the expectations of supra-systems and their degree of satisfaction are considered in relation to different proposed solutions.

Figure 4 highlights the dimensions embodying varied forms of information, representation, and credibility, thus:

- there are several possibilities which create the conceptual space within which context, business projects, and strategic plans are formulated; there are variables (components, connection, relations, interactions) that come into play during *consonance*;
- the *viable system* levels, the different points of view that the possible solutions have to consider, and the contributions that the various actors are obliged to add in order to pursue goals;
- an estimation of a possible project-value, which considers relevant supra-systems, their expectations, and satisfaction in reference to problems solved.
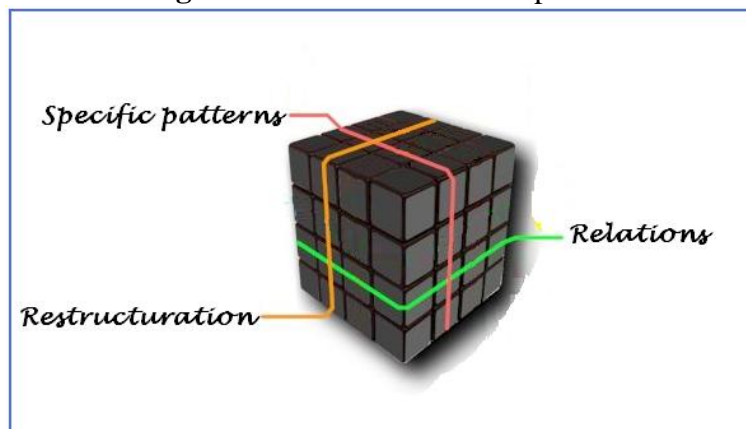
Figure 4. The (*VSA*) *ConsulCube*
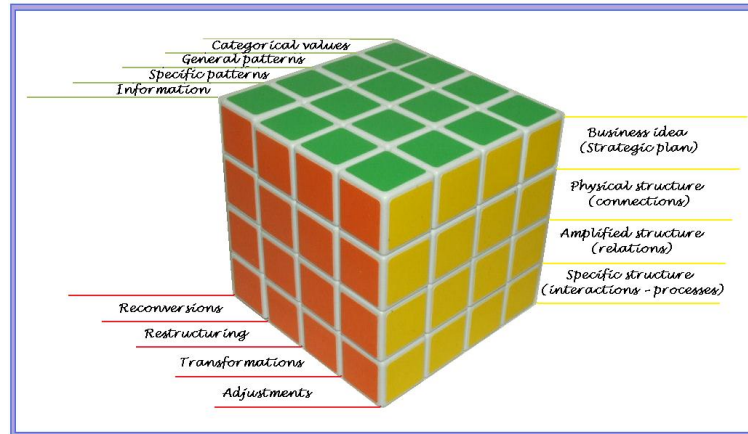
Source: Barile, 2009b; www.asvsa.com.

(VSA) ConsulCube allows, along these lines, to identify: the internal *consonance* of both the context and the analyzed *viable system*; the factors that affect the emergent *resonance*; the constraints, assumptions and the probability of reaching goals. A classical approach to evaluation of the hypothesis would require a calculation of the risk degree. In terms of computation, possibly by using multivariate statistical analysis, it could be useful to try to estimate the confidence degree of the different supra-systems when considering a proposal, but in substance, and unquestionably from the calculation, derives the most appropriate proposals. *Consonance* can be measured, for example, through questionnaires and information collected from the indicators included in the (*VSA*) *ConsulCube* in Figure 5.

(*VSA*) *ConsulCube* does not provide the best solution related to the level of *consonance* among proposals, and the average level of *consonance* between a decision and its context.

Figure 5. Possible evaluation patters

Source: Barile, 2009b; www.asvsa.com.

Figure 5 shows possible evaluation ways that the (*VSA*) *ConsulCube* suggests for a calculation of *consonance*. Figure 6 presents cases which identify the essential characteristics connected to certain pathologies:

A. enabling the evaluation of *consonance* deriving from acquired information in all the adjustment phase of a broad strategic plan;

B. enabling the calculation of correspondence and *consonance*, between specific business patterns (tacit knowledge) and the hypothesis of organizational adjustment;

C. enabling the possibility to act on a more extensive structure, redesigning main function processes which need a close verification of *consonance*, and perception of the operational structure in regards to the hypothesized transformation;

D. enabling a significant variety that influences every possible act of reorganization.

The figure shows some examples of possible interpretations of the dimensions composing the (*VSA*) *ConsulCube*. Decomposing every possible hypothesis and reorganizing some components related to action paths, rather than levels of systemic structural representation and information components, allows for a more complete representation. The use of (*VSA*) *ConsulCube* allows for the understanding that not one proposal is to be considered better than any other, but the prevalence of a proposal is mostly due to the level of *consonance* and average value of *consonance* between the firm and its context. Specifically, the use of (*VSA*) *ConsulCube* allows:

1. to assess the impact of *consonance* changes deriving from the acquisition of information during the adaptation phase, compared to the overall strategic project;

2. to assess the correspondence, in terms of *consonance*, between the specific patterns (tacit knowledge) of the system, and assumptions of organizational compliance;

3. to redesign the processes related to the main functions (extended structure);

4. to appropriately revisit the strategy after changes, especially at categorical values and general interpretation schemes levels of the information variety.

In conclusion, (*VSA*) *ConsulCube* allows decision makers to analyse the degree of initial *consonance*, and to assess the emerging *resonance* following the application of each of the possible actions so as to identify the most appropriate (Saviano and Di Nauta, 2011).

Figure 6. Cases which spot essential characteristics connected to certain pathologies**,**
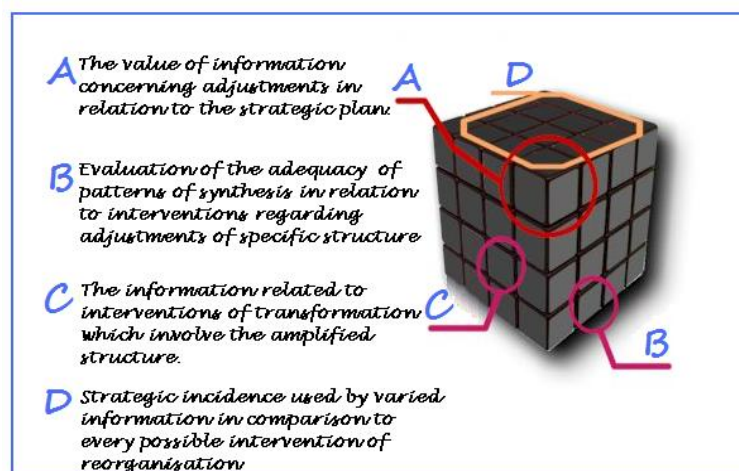
Source: Barile 2009b; www.asvsa.com.

8. Conclusions

Governance and management of relations is a fundamental concept both for *service paradigm* sciences as well as for network and systems theories, therefore, also (*VSA*). In this regard, the present study proposes some important contributions:

▪ *Service paradigm* sciences could benefit from methodological approach that improves the connection between S-D logic, as a philosophical/cultural perspective of service on its natural research ground, and with the platform on which to apply it (SSME).

▪ *Network and systems theories* could benefit from a sort of systematization of concepts and approaches deriving from several research tracks on systems thinking, by an approach that, in the words of Isaac Newton, rests 'on the shoulders of giants'.

- The conceptual scheme of the *relevance* of relations introduced by (*vSa*) could enable the translation of SSME proposals into practice, by perceiving, identifying, interpreting and then ordering all actors/*viable systems* in the contexts to achieve a win-win co-creation exchange. The passage seems necessary in every design and management within SSME, since performing service systems are based on a balanced *consonance* involving all actors.

The study concludes that there are several methodological concepts described by (*vSa*) that could be useful to synthesise *service paradigm* sciences. This paper focuses on just a few of these concepts, in particular, on the potential (*vSa*) contribution to decision makers who strive to achieve survival in complex contexts.

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