## Between service culture, empathy and ethical behaviour: insights derived from the Viable Systems Approach

## Francesco Polese – University of Cassino

## Bernardino Quattrociocchi – University of Rome 'La Sapienza'

**Purpose** – Scope of the paper is to analyze service research and its connection with empathy and ethical behaviour of individuals, and other socio-economic actors in light of the Viable Systems Approach, a methodological lens useful for the interpretation of complex phenomena.

**Methodology/approach** – This papers is a conceptual analysis of recent developments in human behaviour, with specific reference to business environment I search for individual contribute to organization competitiveness. The quest is pursued taking into account developments concerning Service Science, Service Dominant logic and Viable Systems Approach (proposed by Italian researchers and highly diffused in Italy in last decade) based upon recent developments of the concept of Service and of the concept of Empathy, both declined in a business environment.

**Findings** – Several marketing research important scientific proposal, such as Service Dominant logic (Vargo & Lusch, 2004; 2006; 2008), Many-to-Many Marketing (Gummesson, 2009) and Service Science (Spohrer et al, 2007; etc.) propose the interpretation of Service as a cultural, philosophical attitude for relationship management capable of fostering successful and competitive behaviour. Every decision maker in the market, or in every business context, is influenced in his/her choice and behaviour by empathy and ethics, as well as his/her strong believes and intimate values. Satisfactory/viable decision may be detected and highlighted also through the Viable Systems Approach methodologies and practices (Golinelli, 2000; 2010; Barile, 2000; Barile & Polese, 2010).

**Research implications** – In order to improve marketing research interpretation of markets and marketing decision makers it is important to adopt scientific proposal capable of analyze and manage complexity and the role of many actors, naturally involved in co-creation exchanges. The Viable Systems Approach, being it a scientific proposal based on systems theory and synthesizing several interdisciplinary contributes, with its 10 Fundamental Concepts represents interesting insights for this purpose.

**Practical implications** – The paper helps practitioners to better manage service and enables a better comprehension of decisions displayed the numerous actors involved in co-creating exchanges and experiences.

**Originality/value** – The paper suggests that service research cannot be anymore confined within its natural boundaries, since it is starting to involve human behaviour, markets and complex phenomena. Thus it ought to valorize managerial and system theories, as well as

scientific proposal developed in many other research domains, in order to accomplish his demanding task.

Key words: Service Dominant logic; Service Science; Viable Systems Approach; ethics; empathy.

**Paper type** – Conceptual paper

### 1. Business behaviour in the III millennium and the role of individuals

Within a socio-economic view of *homo sapiens*, the classic economic literature theorized with philosopher Jeremy Bentam, in middle of XVIII century, that human behavior was focused to the maximization of utility, intended as the ability of an object to produce benefit, advantage, pleasure, goods or happiness, or on the other hand to avoid pain, aches, sadness to whom interests we are dealing about (Bentam, 1789); the fulcrum of this human behavior interpretation was every single individual.

The evolution of mankind seemed to confirm, however, that individuals attempted to fulfill their needs and interest in a more ample social and economic environment, introducing the intriguing issue of an *homo economicus*, highlighting how much individual support the development and success of the business in which they operate.

Despite modern hyper-specialization leading us to put an economic reductionistic view to the fore, reducing the value of a holistic and systemic view, in economic literature there is a growing awareness about how everything is interconnected (Capra, 1996) and has to be interpreted with a systemic lens (Golinelli, 2011; Proietti and Quattrociochi, 2009); this trends seems to be confirmed by recent global crisis and by socio-political dramatic movements affecting in these days north Africa and the Arabic world in general.

Hence recent trends stimulate both the analysis of individuals' role in business and the interpretation of business and socio-economic events with a more apmle perspective, embracing the dense relational pattern characterizing business arena. According to IBM (2002): "Our connectedness affects the work we do, the choices we make and the things we know". Though still emerging from its academic roots, for instance, Social Network Analysis (SNA) is entering the mainstream thanks to better analytical tools, visualization, complementary technologies and data availability" (IBM, 2002). In this regard, there is evidence that people with rich social relationships are better informed, more creative, more efficient, and better problem solvers (Boissevain, 1974; Coleman, 1990). Hence, personal networks characterizing individuals foster business cooperation and collaboration (Cross, Nohria, Parker, 2002).

In this regard, social network analysis (SNA) has recently emerged as an important aspect of knowledge management. According to IBM (2002): "Business structures, whether formally hierarchical or networked or market-based, have become more ambiguous and fluid as technology has connected people within the organization. Companies can use SNA to better understand their [own] structure and to gain a deeper understanding of how their clients are organized and how they might be supported by the company's goods or services".

There has been many scientific positions about social relations: some have defined them as a component of social capital based upon market relations, hierarchy relations and social relations (Adler, Kwon, 2002). Others have analyzed the interaction between the social dimension and business performance (Jenssen, Koenig, 2002; Moran, 2005; Ibarra, Hunter, 2007); some others have tried to relate social relations to networks theories (Castells, 1996; Uzzi, 1996). We may define social relations as follows (Polese, 2010): "Social relations may

# be represented by the relational pattern that characterizes every individual in a business and that involve personal, business and stakeholders relations".

Hence we may say that organizations are not autonomous entities; rather, they are dependent upon individuals (Tagliagambe, Usai, 2009) and the networks of relationships that exist among them (Vicari, 2007). Capra (2002) has observed that "life consists in a network of relationships in which we interact", (Capra, 1997), and Gummesson (2004) has noted that "life is a network of relations, and so is business". Social relationships enhance business performance and competitive advantage by fostering effective value co-creation processes concretizing service culture and favoring empathic behavior of individuals and consequently of business.

Along with social relationships characterizing individuals in business, which tend to play a key role in business performance evidences show that relationships in general seem to be a key factor of business success. A relational view of business behaviour is certainly not new. Nevertheless in recent decades this view to interpret business is reaching its climax.

In line with a relational view (Prahalad and Ramanswamy, 2000) of business performance, network theories consider every actor as a dynamic, operant and active resource that enables reticular/networked interactions (Lovelock and Gummesson, 2004; Achrol and Kotler, 2006), and organisations and their activities are closed to many relationships (Gummesson, 2008). In this view, system relationships lead business components, behaviour, strategies, policies, and organisations; these relationships are then consciously determined and finalised to necessary mutual satisfaction (Womack and Jones, 2007; Lusch, Vargo and O'Brien, 2007) through systemic consonance and competitiveness (Golinelli, 2010).

According to the *vSA*, the concept of competitiveness (related to system viability) is strictly linked to the consonant and resonant interactions among systems that share their own resources for the system's benefit in a win-win relationship in order to capture and manage its component dynamics, especially with reference to the variation between internal "characteristics" and external "opportunities". Emerging relationships are very much related to individuals who interpret and realise business missions, strategic actions, and management practices through their values and cultural identity (Golinelli, 2010). This kind of social relations can be defined as a "relational pattern that characterizes every individual in a business and that involves personal, business and stakeholder relations" (Polese, 2010); in social relationships, thus, the consensus is favored when systems are mainly constituted by cohesive, interpersonal, fiduciary, long-term relationships that are based on values rather than rules.

## 2. Individuals, business, socio-economic contexts

*Homo homini lupus*! Mankind has always been attributed an aggressive behaviour finalized to survival and competitiveness, intrinsically oriented to the overcome of others for personal advantages and everyone own finalities. But is this really true? Is it true that humans' real nature is so aggressive? Who has never been touched by the suffering of others, stimulated by interior feelings related by joy or pain felt by unknown people?

Everyone of us at least once in our life has experienced feelings inducted by someone else's emotions, a mate, a relative, a friend or simply someone standing aside and feeling sad, depressed, suffering for some reason. Recent scientific proposition in several research domain, from biology to sociology, from philosophy to anthropology, from medicine to economics stimulate new developments in a very scarcely analyzed knowledge domain in which very interesting theories and thesis are starting to raise. Mankind, in brief, may be naturally inclined to empathy and this natural inclination, strongly present at an early stage (first months/years of life), may in time be more or less present depending on educative environment, values heritage and the other social conditions affecting individuals youth and growth till maturity. Despite differences in the levels of empathy, these traits seem to be present in each one of us and these characteristics influence in various ways the behavior of everyone of us.

Given that, we argue that the determinants of human behaviour, as well as of business decision making are changing significantly. For more than 200 hundreds years economy has been based upon Adam Smith's scripts suggesting that human and business behaviour were oriented and finalized to specific and personal interests, even though the consideration about everyone's advantage finally drives towards an extended society interests (Smith, 1776). As suggested in recent years this view has been challenged thanks to relations and interactions brought on by information and communication technologies, internet and social networks, and by networks characterizing business today. In a way now everyone's interest is so interrelated and interconnected with many others: it is influences, oriented, tied with someone else's interest, it may be a client, a partner, an institution, a friend or just a supplier, but no one is alone anymore in determining its own interest, especially when considering a longer time view rather than the short period.

In this mainframe we can agree with philosopher and historian Michael Focault (1926-1984) as interpreted by Marconi, who views human existence as shaped within the production functions governing its life defining the needs of a society in which every individual lives and through which every individual satisfies his own needs (Marconi, 2001). Therefore there has been for centuries the attempt to relate individual needs to society needs and individual needs to business; in managerial sociology both Druker (1978) and De Masi (1973) on the topic draw a parallel with systems theories, relating individuals and business units to the business macrosystem. In other words there have been various attempt to link individuals to the centre of economic studies highlighting the relationships existing between individuals and business.

#### 3. Decision Making between empathy, sentiment and ethics

Darwin's view of opportunistic and selfish human behaviour striving for survival has been recently challenged by a new important trait attributed to human being, the empathy, according to which everyone of us is intrinsically characterized by more or less developed emphatic traits leading humans to openness and feelings towards every other human creature.

The term empathy derives from the german Einfuhlung (first introduced at the end of '800 by Robert Visher), term related to the ability of an observer to project its own sensibilities onto an object of adoration or contemplation (Davis, 1996). Lately the concepts was elaborated and

re-interpreted at the beginning of '900 by the psychologist Edward Titchener who introduced the term empathy referring to the process of self-analysis and introspection of the deepest sentiments of human feelings to favor identity and selfhood.

Empathy was a powerful new conceptual term and rapidly became a controversial term among scholars. Some (Mead, Piaget and others) tended to attribute to the concepts a sort of rationale, according to which empathy could be viewed as a cognitive function wired into the brain but requiring cultural attunement, hence relating this trait to the need of human to "read" others in order to establish social relations. Others viewed empathy as essentially an affective or emotional state with a cognitive component. The empathic observer doesn't lore his sense of self and fuse into the other's experience, nor does he coolly and objectively read the experience of the other as a way of gathering information that could be used to foster his own self interest (Rifkin, 2009). Rather it has been suggested that empathy could be defined as "the involvement of psychological processes that make a person have feelings that are more congruent with another's situation that with his own situation" (Hoffman, 2000, p.30). In a way empathy can be interpreted as a total response to the plight of another person, started by a deep emotional sharing of that person's state, accompanied by a cognitive assessment of the other's present condition and followed by an affective and engaged response to attend their needs and help ameliorate their suffering.

Human being, in other words, have a genetic and intrinsic impetus to friendly behavior and reciprocal affiliation with other living creatures (Wilson, 1984).

One among the more evident factors of children in their first years of development is in fact empathy: the search for autonomy, to become an island, it is not really in human nature as we, on the contrary, look for closeness, love and peaceful and profitable relationships with other individuals. Finally numerous child development psychologists confuted the conventional belief that equates self-development and self-consciousness arguing, on the contrary, that a sense of selfhood and self-awareness depends on and feeds off of deepening relationships to other people. Empathy, in turn, is the mean by which companionate bounds are forged.

Empathy was put to the fore and even President Barack Obama has made the term the core of his personal political philosophy and the centerpiece of his political decisions. However to avoid trivializing the term in a public arena we need to run deep into its meaning and relate it to social evolution of human being. While primitive empathic potential was wired into the chemistry of some mammals nowadays empathy is not only related to moral codes (embedded in laws and social policies) but is truly characterizing individuals much more than public morality, since it seems to be deeper than that and tied to individual behavior, inner feelings and embodied experience.

We don't believe empathy is not just a psychological and human behavior topic. Since individuals affect strongly business, and competitiveness in general, empathy itself affects business behavior much more that designed and planned strategies do, or at least in a much more subtle way. Individuals, their personal characteristics and values, their social relationships, hence, have a growing effect on business performance (Polese, 2010). We believe that the introduced 'empathic revolution' has put human nature to the fore, highlighting the possible role of sentiment and openness characterizing individuals and consequently business. A parallel scientific proposal has introduced the concept of service characterizing competitive business behaviour. Service oriented behaviour may be seen as one of the declination of individual empathy in business, due to its high consideration and respect deserved to others, and the strong commitment to everyone else's satisfaction and expectations fulfilment.

#### 4. Service culture in light of recent service research mainstreams

With the growing relevance of services in all business activities (including manufacturing), today's firms are oriented towards service, focusing many of their business functions on service logic based on the evolving concept of "Service". This service-oriented framework influences business models, decision-making and relationship management, stimulating organisations to continuously analyse business strategies and practices, reviewing their role and its relation to the market (Rullani, 1997; Grönroos, 2000), within our Service Economy (Levitt, 1981).

From a traditional point of view, service is generally regarded as work performed by one person or group that benefits another; it is an activity rather than property, provides assistance and expertise rather than a tangible product, and entails a provider/client interaction that creates and captures value; "normally, an element of service is a process – or a diverse collection of activities – applicable in principle to business, education, government, and personal endeavours" (Katzan, 2008).

According to Service Dominant logic (S-D Logic), service is defined as the use of specialised competences (operant resources—knowledge and skills), through actions, processes, and performance for the benefit of another entity or the entity itself (Vargo and Lusch, 2008). According to Service Science, Management, Engineering and Design (SSMED), service is considered a system of interacting and interdependent parts involving people, technologies and business activities that are constantly connected to the outside; these components are used to harness the firm's own distinctive characteristics and to achieve and maintain sustainable competitive advantage (Maglio, Srinivasan, Kreulen and Spohrer, 2006; Maglio and Spohrer, 2008).

In general, "services are intangible activities customised to the individual request of known clients" (Pine and Gilmore, 1999); the related customisations lead to co-productive relationships, and interactions with clients as participants in the service process represent the real key characteristic that differentiates a service system model from the traditional economic transactional one.

Services can also be defined as a series of activities in which resources (employees, physical resources, goods, systems of service providers) are used in interaction with the customer to find a solution (Grönroos, 2008); from this perspective, service involves both a provider and a client seeking and providing solutions, and their relationship can be viewed as a system of parts that interact when a service is provided.

Based on previous interpretations, service can be represented as "a kind of interaction between entities in a reticular system, finalised to improve value co-creation outcomes under a win-win logic inside interrelated processes" (Polese, Russo and Carrubbo, 2009).

Under S-D logic, integrated and relational service provision systems must be reinforced by relationships between organisations. Actors in service ecosystems are conditioned (or positively influenced) by many system elements (like technological, economical, political and social influences); all business processes are therefore characterised by dialogue, continuous interactions, and updating. All business can then be understood as conducting relational service activities. In Service Science, relationships among active participants in service systems (Alter, 2008) are fundamental to sustainable development; hence, all interacting systems should rely on their own environments to provide services.

Research on service systems incorporates a detailed analysis of various diverse service events so as to develop a view of the servicescape (Katzan, 2008). From this perspective, service involves both a provider and a client seeking and providing solutions. Their relationship can be viewed as a system of parts that interact to perform a service. This service system is not simply the sum of its parts; the interactions also form a higher-order construct (Lusch, Vargo and Tanniru, 2009).

In terms of relationships, today we observe how networks can take precedence over single nodes because they cannot be reduced to the sum of individual nodes, links and interactions. It is apparent that organisations are not autonomous entities but rather are dependent upon individuals and the networks of relationships that exist among them (Vicari, 1991). In a way we may assume that "win-win" relationships develop only through the development and maintenance of relationships with interested parties and through a common willingness to favour co-creation processes (through non-opportunistic behaviour, by creating long-lasting relationships in which we interact", (Capra, 1997) and that "life is a network of relations, and so is business" (Gummesson, 2005). In sum, interaction becomes the driver of value, the way through which service systems develop a joint process of value creation: Service systems can create competitive advantage by improving reticular relationships.

After having introduced briefly the key principles of S-D logic and SS, highlighting their shared conception of service as a relational phenomenon, we are now going to introduce a scientific proposal strongly based upon relationship management and network theory which can contribute to the understanding of service culture and empathy.

#### 5. The contribute of VSA in concretizing service culture and empathic behaviour

Service culture as an attitude of business based upon respect and reciprocal expectations' satisfaction. It is indeed strongly linked with a relational view of the firm proposed by the Viable Systems Approach (VSA) (Golinelli, 2000, 2005, 2010; Barile, 2000; 2008; A.A.V.V., 2011). The VSA, which has been developed and widely diffused within the Italian cultural community in the past decade, is a multidisciplinary approach that is linked with network analysis and general systems theory. Despite its solid theoretical foundations, the VSA is not

strictly a theory; rather, it represents a methodological approach that is useful for the comprehension of complex phenomena involving individuals, communities, business, and society in general. It enables the analysis of relationships among enterprise's internal components (sub-systems), as well as the analysis of relationships between enterprises and other influencing systemic actors of their context (supra-systems) (Golinelli, 2000; Barile 2008).

The vSA is a systems-based approach to business theory that has become increasingly prominent in Italian academic circles in the past decade. The origins of systems theory go back to the 1950s when scholars from various scientific and social disciplines developed an interdisciplinary theory based on the concept of systems (von Bertalanffy, 1956). Systems thinking shifted the focus from the parts to the whole; that is, it perceived reality as an integrated and interacting unity of phenomena in which the individual properties of the isolated parts become indistinct, while the relationships between the parts (and the events they produce through their interaction) became much more important. By adopting the view that "system elements are rationally connected" (Luhmann, 1990), the systems approach sought to explain a phenomenon in its entirety (von Bertalanffy, 1968). This shift of focus from the components themselves to their relationships suggests that from the attention to the individual elements displayed by the observer should shift to a focus on the relationships among the elements, and this should be accomplished without losing sight of the identity of each individual element.

Drawing on such systems thinking, the *vSA* interprets observed actors and their environments beginning with an analysis of the relationships among fundamental elements, and proceeding to a consideration of more complex related systems (von Bertalanffy, 1968). The fundamental unit of analysis is a system made up of many parts (Parsons, 1971). Every entity (an individual, a consumer, an organisation, or a community) is perceived as a system that is made up of interlinked sub-components that strive towards a common goal

An important concept in VSA is the notion of a firm as a viable system—that is, a firm is a viable system if it has the ability to enhance its survival capacity continuously over time. According to VSA, this is the end goal of the firm as a system. This depends on the efficiency and the efficiency of the interactions among the component parts of the system within every business arena. Moreover, the firm as a viable system interacts with other systems, which can be identified as 'supra-systems' and 'sub-systems'.

The so-called 'supra-systems' are more or less critical in their influence on the focal system, whereas the 'sub-systems' are directed and managed by the focal system in a manner that contributes to its viability (Barile, 2008). The introduction of these concepts challenges the notion of 'system boundaries', which has very little relevance in this perspective. Indeed, according to Barile (2008), a given system tends to absorb 'supra-systems' and 'sub-systems' in order to develop itself as a viable system

The VSA has introduced 10 Fundamental Concepts (see appendix n.1), among which several are particularly useful in the underpinning of relationship management, service culture understanding and empathy fulfillment.

FC4 - Open systems and systems' boundaries: Systems are open to connection with other systems for the exchange of resources. A system boundary is a changing concept within which all the activities and resources needed for the system's evolutionary dynamic are included (Beer, 1975). This leads to co-creation exchanges based upon service culture, related to an openness of actors who ought to be concerned of any other party's needs and expectations.

FC 7: Consonance and resonance: The term 'consonance' refers to the potential compatibility between systems elements; however, for system survival, real systemic harmony needs to be achieved as 'resonance', which refers to elements operating in a distinctive fashion for a single purpose. Resonance is thus harmonious systemic interaction, whereas consonance is structural and relational (Barile, 2008). Regarding the role of the customer inside the production process, as participation by some of the system entities involved in a service network's value co-creation, *VSA* consonant and resonant interactions among actors, strengthening value co-creation processes and experiences, represent just a part of the dense system patterns at play and are part of organisations' viable behaviour as they attempt to increase internal capacities through external resources.

FC 8: System viability: A system's ability to survive is determined by its capacity, over time, to demonstrate consonant and resonant behaviour (Piciocchi and Bassano, 2009; Piciocchi et al., 2009). A viable system can dynamically adjust its structure and behaviour to achieve consonance with its context, and thus preserve its stability.

FC 9: Adaptation and relationship development: Firms are able to compete and survive in a particular context if they engage in continuous dynamic processes of change (Golinelli, 2000, 2010; Barile, 2008; Saviano and Berardi, 2009). Competitive enterprise behaviour requires the ability to identify and manage functions and relationships, establish communication channels, organise information flow, and rationalise and harmonise enterprise development with the environment (Golinelli et al, 2002; Christopher, 2007).

Based on the VSA, looking at the changes in firm performance when environmental contingencies occur, we can see that firms are able to survive in a particular context only if they improve their capacity to evolve and to make operations adherent to external changes. Indeed, the openness of investigated systems (service systems for service logics, value networks for network theories, viable systems for VSA) homeostatically leads to dynamic adaptation based upon external changes influencing business behaviour because their survival is directly connected to the ability to look for and foster dynamic satisfactory evolution (equifinality).

Noting that the vSA is aligned with service logics and network theories related to consumer involvement maximization, we know that a service-centered perspective creates opportunities for expanding the market by assisting the consumer in the process of specialization and value creation (Barile and Polese, 2009) and that network's perspectives create dynamic interaction that influences the design and management of positive interactions among actors (Gummesson and Polese, 2009).

Within complex service systems, hence, we can find a dense, articulated and complex pattern, with several differences in terms of features like synergies, interactions, resource-

sharing, common finality, value co-creation, service-oriented structures, and viability; these features influence every actor's strategy and policy (adaptation capacity, ability to foster potential connections and reticular relations, ability to maintain and improve system relationships within themselves and their system elements, the capacity to manage these relationships and to pursue efficient governance), supporting competitive behaviour in a modern economy (Rust, 2004) and creating the capacity for long-term survival. The main characteristics of the evolution of business systems as mentioned are directly related to relationship development through networked interactions, synergistic relationships, resource-sharing, common finality, and value co-creation.

Thus, to improve firm competitiveness and system relationships, we must look for dynamic models based on multi-criteria decisions supporting systems that are capable of reaching satisfactory outcomes for decision makers as they search for continuous feedback on production processes to align their traits with consumers' needs, considering the influence of the critical resource owners (supra-systems) and the relevance of sense-making (Weick, 1995) as crucial for context comprehension and for consequent system action that creates satisfactory processes with stakeholders, owners of critical resources (Barile, 2009). This approach seems to be coherent with a service culture as well as with empathic behavior based upon respect and openness.

In this light the *vSA* contributes to a new way of directing and managing inter-firm relationships, strengthening the possibilities and the qualities of systems' evolutions by focusing upon smart, adaptive and proactive behavior maximizing service exchange. In a way, *vSA* stimulates the importance of service culture and valorizes empathic behavior of individuals due to its inner purpose represented by viability, a concepts that is not referred to a single system, but may be referred only to the system in relation with all other interested actors with which the system itself interacts significantly.

However we still need to address what ensures the internal cohesion of a viable system/actor by a balance of business final goals focusing on incentives (grounds for economic opportunities based on short-term utilitarian considerations) or trust (socio-psychological grounds based on long-term utility) (Lindenberg S., 2000). In order to accomplish such a result, it seems important that relationships among actors should be based upon empathy, capable of creating a climate of authentic trust and collaboration between actors.

In fig. 1 we then represent this system vitality, highlighting the main factors that build a viable behavior. The core, obviously, is surrounded by a shaded area strictly necessary when pursuing harmonic behavior, in which we find systemic features, as well as relationships' governance, unique vision and common strategies. The further away from the nucleus, the more harmonic/viable the system happens to be, since we add to the system other elements that enrich the capacity for competitive behavior; among these we find values, empathy, identity, sense of belonging, social behavior and ethics. The closer to the nucleus the more we get close to reality (related to the probability of finding such a systemic entity in business arena). Unfortunately, in fact, the model seems to be more an ideal goal rather than a concrete organizational form.





Every actors, according to the proposed model, ought to direct its actions towards the system survival in the long-term. This is obviously done by continuously improving service management (in the global sense) in order to keep competitive behavior based upon emphatic values affecting all the involved actors.

## 6. Non concluding remarks

Service culture, empathic behavior, business management and competitive arenas. How can we deal with these looking for viable behavior in the new millennium. We believe that actors ought to balance several principles in directing their action according to their mission and in order to pursue their vision. Among these the VSA may supply a methodology capable of interpreting harmonic behavior and stimulate viable decision making, as represented I nthe above described figure 1.

When balancing exogenous needs characterizing numerous actors participating a service exchange, certainly it appears difficult to identify an adequate relational asset between many actors which are not very homogeneous, everyone of which characterized by its own set of stakeholders and resource owners. Thus, effective governance and viable behavior seems to be strongly linked to a service culture, to empathic behavior as key factor of these positive interactions. Accordingly, social relationships enhance business performance and competitive advantage by fostering effective value co-creation processes concretizing service culture and favoring empathic behavior of individuals and consequently of business.

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| <ul> <li>FC1 Individuals, organisations, and social institutions are systems that consist of elements directed towards a specific goal.</li> <li>FC2 Every system (of level L) identifies several supra-systems, positioned at a higher level (L+1), and several sub-systems, located at a lower level (L-1).</li> <li>FC3 The interpretation of complex phenomena requires interdisciplinary approaches, and should synthesize both a reductionistic view (analysing elements and their relations) and an holistic view (capable of observing the whole).</li> <li>FC4 Systems are open to connection with other systems for the exchange of resources. A system boundary is a changing concept within which all the activities and resources needed for the system's evolutionary dynamic are included.</li> <li>FC5 Viable systems are autopoietic and self-organising: that is, they are capable of self-generating internal conditions, which through self regulation, support the reach of equilibrated conditions, thus synthesising internal possibilities and external constraints.</li> <li>FC6 Every organisation is constituted by components that have specific roles, and should bitotice withel external constraints.</li> <li>FC6 Every organisation is constituted by components that have specific roles, and should bitotice withel external conditions.</li> <li>FC6 Every organisation is constituted by components that have specific roles, and should bitotice withele metherine within external conditions.</li> <li>FC6 Every organisation is constituted by components that have specific roles, and should bitotic with the within the set within external for the passage from structure to system involves a passage from a static view to a distinct where the intervient i</li></ul> |      |
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| <ul> <li>reach of equilibrated conditions, thus synthesising internal possibilities and external constraints.</li> <li>FC6 Every organisation is constituted by components that have specific roles, activities and chiestives which are undertaken within constraints are the basis for sustainable behaviour in the face of opportunities and threats.</li> <li>FC6 Every organisation is constituted by components that have specific roles, activities and chiestives which are undertaken within constraints are the basis for sustainable behaviour in the face of opportunities and threats.</li> </ul>   |      |
| external constraints. These two characteristics are the basis for sustainable behaviour in the face of opportunities and threats.<br>FC6 Every organisation is constituted by components that have specific roles, activities and chieve which are undertaken within constraints are the basis for sustainable behaviour in the face of opportunities and threats. The passage from structure to system involves a passage from a static view to a desired which are undertaken within constraints.  |      |
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| The passage normal factor solution and the second passage normal factor end by the passage normal f           |      |
| acuvities, and objectives, which are undertaken within constraints, norms, and – dynamic view, and focus shifts from individual components and relations to an holist  | ic   |
| rules. view of the observed reality. From the same structure, many systems can emerge as   | a    |
| From structure emerges a system through the transformation of relations into consequence of the various combinations of internal and external components   |      |
| dynamic interactions with sub-systems and supra-systems. designed to pursue various objectives.  |      |
| FC7 Systems are consonant when there is a potential compatibility among the Consonant relationships refer to the static view (structure) where you could just  |      |
| system's components. Systems are resonant when there is effective harmonic evaluate the chances of a positive and harmonic relation.   |      |
| interaction among components. Resonant relations are referred to a dynamic view (systemic) where you could evaluate and effective positive and hermonic interactions.  | ite  |
| CONCIECTE and energine and narmonic interactions.  |      |
| harmonic behavior in sub-systems and subra-systems through consonant and canability  |      |
| resonant relationships.  |      |
| FC9 Business dynamic and viability require continuous structural and systemic The evolutionary dynamics of viable systems demonstrate continuous alignment   |      |
| changes focused to the alignment of internal structural potentialities with between internal potentials and external expectations.   |      |
| external systemic demands.   |      |
| FC10 Viable systems continuously align internal complexity with external complexity Internal and external alignment is achievable through a cognitive alignment, a   |      |
| in order to better manage changes affecting its viable behaviour. Decision-<br>knowledge process that includes chaos, complexity, complication, and certainty  |      |
| makers within these cognitive processes are influenced by strong believes, (through processes of abduction, induction and deduction).  |      |
| Source: Adapted from Barile & Polese (2010b)   |      |

# Appendix 1: The 10 fundamental concepts (FCs) of VSA