

THE VIABLE SYSTEMS APPROACH (vSA) AND ITS POTENTIAL CONTRIBUTION TO MARKETING THEORY

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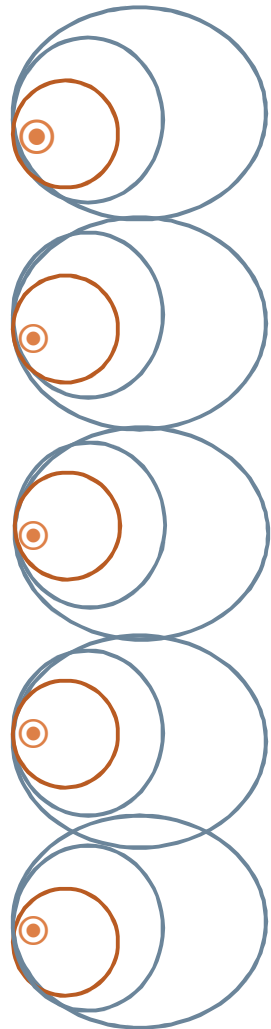
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Agenda:

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VSA Definition within Systems Theories

” Interdisciplinary Roots and theoretical Framework

” Research Focus

” Fundamental Concepts

” Implications per Marketing Theory

VSA® Interdisciplinary Roots

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Ecology

*Interesting to note the interaction between systems operating on our planet, the ground was laid for a theory of the earth as an integrated whole and living thing, in contrast with the mechanistic vision of the universe. Particularly interesting are the organic aspects and equifinality (**Hannan and Freeman, 1977**).*

Biology

*Within their own environment (full of knowledge, resources and activities), systems are encouraged to selective mechanisms focused to the increase of their complexity in the attempt to align it to the external complexity; living systems are characterized by autopoiesis, (**Maturana and Varela, 1975**)*

Sociology

*Cognitivists suggest that the main source of value creation lies in knowledge and stress the importance of learning mechanisms (**Clark, 1993**)*

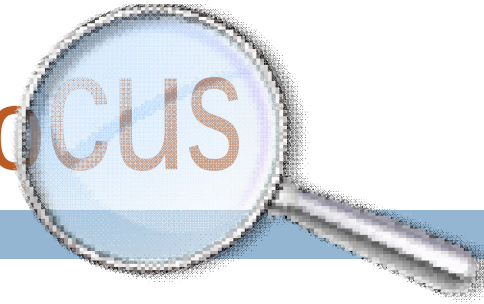
Cybernetics

*From cybernetics comes the idea to interpret the firm as a viable system capable of homeostatic self control and self-regulation (**Beer, 1975**)*

VSA[®] Definition

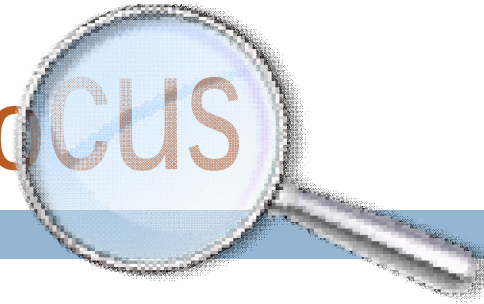
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*“The **Viable Systems Approach (VSA)** represents a scientific proposal both suggesting **a new representation of the behavioural approach to business** (and the relative interactions with its context) and suggesting **a new interpretation of consolidated managerial models**; it is linked with network analysis and based on general system theories and social analysis”*



- ❑ The VSA has gathered several multidisciplinary contributions finalizing them to the observation of complex phenomena.
- ❑ VSA stimulates and enables an analysis of the relationships that exist among an enterprise's internal components, as well as an analysis of the relationships between the enterprise and other systemic entities in its context.
- ❑ VSA proposes a deep analysis of the Structure - Systems dualism when introducing that every *system* represents a recognisable entity emerging from a specific changing *structure* (set of individual elements with assigned roles, activities and tasks performed in compliance with rules and constraints).

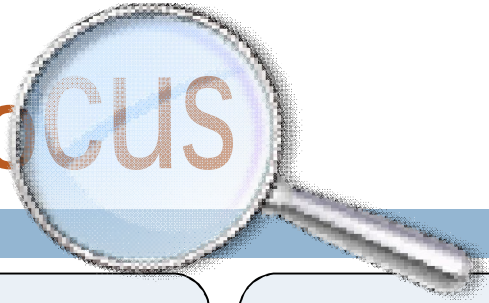
VSA® Research Focus



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- ❑ System origins from its own structure: this kind of evolution derives from the dynamic interactive activation of static existing basic relationships. A structure can be studied (what is it? How is it made?), whereas system should only be interpreted (how does it works? What logics does it follows?)”.
- ❑ According to VSA, a firm develops as an open system characterised by:
 - many components (both tangible and intangible);
 - interdependence and communication among its components;
 - activation of these relationships in order to pursue the **system’s goal**.

VSA[®] Research Focus



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Enterprise as an open system, immersed in the environment, with which it interacts exchanging information, matter and energy.

It is a complex system of interacting elements rationally connected

The firm is a system with its purpose: it looks for survival.

The enterprise is an open system, aimed,
Organic, cognitive, cybernetic

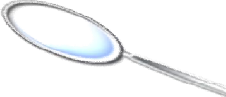
It is characterized by a life cycle similar to that of living organisms, which pursues its own survival in a selective environment

The cognitive approach suggests that the main source of value creation lies in knowledge and stresses the importance of learning mechanisms

From cybernetics it comes the idea to interpret the enterprise as a system capable of homeostatic self-control

VSA[®]

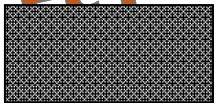
Fundamental Concepts

VSA  FCs

vSa Fundamental Concept

Comment

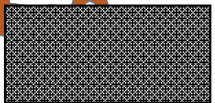
Ec1



Individuals, organisations, and social institutions are systems that consist of elements directed towards a specific goal.

People, families, networks, enterprises, public and private organisations are complex entities, all of which can be understood as systems.

Ec2

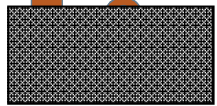


Every system (of level L) identifies several supra-systems, positioned at a higher level (L+1), and several sub-systems, located at a lower level (L-1).

Every hierarchy of systems is determined by observation from a specific perspective. The designation of a 'supra-system' or a 'sub-systems' is thus subjective.

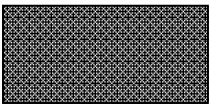
vSa Fundamental Concept

Comment



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).

The contribution of relationships (static, structural) and interactions (dynamic, systemic) is fundamental to the observed phenomenon (reality).

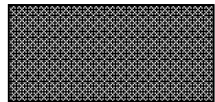


Systems are open to connection with other systems for the exchange of resources. A system boundary is a changing concept within which all the activities and resources needed for the system's evolutionary dynamic are included.

Nothing happens in isolation. The exchange of information and service of open systems is fundamental within every system dynamic. Within systems boundaries not only property resources are valorized, but many available, thus accessible resources (even though these are owned by other systems).

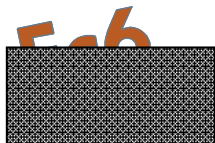
vSa Fundamental Concept

Comment



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.

Every system is autopoietic, and is thus able to generate new internal conditions. Every system is also self-organising as it continuously aligns internal and external complexity. These two characteristics are the basis for sustainable behaviour in the face of opportunities and threats.



Every organisation is constituted by components that have specific roles, activities, and objectives, which are undertaken within constraints, norms, and rules.

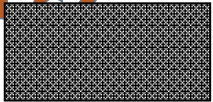
From a structure emerges a system through the activation of relations into dynamic interactions with sub-systems and supra-systems.

The passage from structure to system involves a passage from a static view to a dynamic view, and focus shifts from individual components and relations to an holistic view of the observed reality. From the same structure, many systems can emerge as a consequence of the various combinations of internal and external components designed to pursue various objectives.

vSa Fundamental Concept

Comment

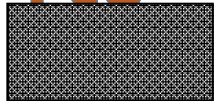
Fc7



Systems are consonant when there is a potential compatibility among the system's components. Systems are resonant when there is effective harmonic interaction among components.

Consonant relationships refer to the static view (structure) where you could just evaluate the chances of a positive and harmonic relation. Resonant relations are referred to a dynamic view (systemic) where you could evaluate concrete and effective positive and harmonic interactions.

Fc8

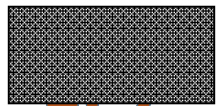


A system's viability is determined by its capability, over time, to develop harmonic behavior in sub-systems and supra-systems through consonant and resonant relationships.

Viability is related to the system's competitiveness and to the systems co-creation capability.

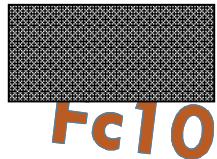
vSa Fundamental Concept

Comment



Business dynamic and viability require continuous structural and systemic changes focused to the alignment of internal structural potentialities with external systemic demands.

The evolutionary dynamics of viable systems demonstrate continuous alignment between internal potentials and external expectations.



Viable systems continuously align internal complexity with external complexity in order to better manage changes affecting its viable behaviour. Decision-makers within these cognitive processes are influenced by strong believes, his/her interpretational schemes, and information.

Internal and external alignment is achievable through a cognitive alignment, a knowledge process that includes chaos, complexity, complication, and certainty (through processes of abduction, induction and deduction).

VSA® ...some comments

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- **a viable system lives**, its aim is to survive within a context which is populated by other (viable) systems;
- **every context is subjectively perceived** by a viable system's top management (the decision-maker) from analyzing its environment (a macro-system in which the decision maker is immersed) distinguishing and identifying its relevant supra-systems (resources owners) in relation with its objective;
- **a viable system has the capability of dynamic adjusting** (auto-regulation) its structure: hence we may refer consonance to the system's attempt to correctly interpret contextual signals, and resonance to the concretization of the consequent competitive behavior in order to maintain stability (if the system satisfies external expectations and needs displayed by relevant supra-systems).

VSA® ...some comments

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Viability

VSA proposes that viable systems are able to survive in a particular context as a result of dynamic processes of adaptation, transformation, restructuring, and so on.

This continuous **learning process** requires constant monitoring and evaluation of accumulated technological knowledge and innovation to re-orient the tasks and objectives of the system.

Thus viability describes the evolution of the system since it can capture the **dynamic** of its components especially with reference with the variation of system's traits due to internal characteristics and external opportunities.

Indeed, VSA goes beyond that, in the attempt to: **classify** the external supra-systems (in order to understand which of them are more critical and influential for business behaviour); establish a qualitative method to measure the system capability to satisfactory behaviours (based upon affinity of culture, knowledge, value and other dimensions).

VSA[®] Insights for Service Research

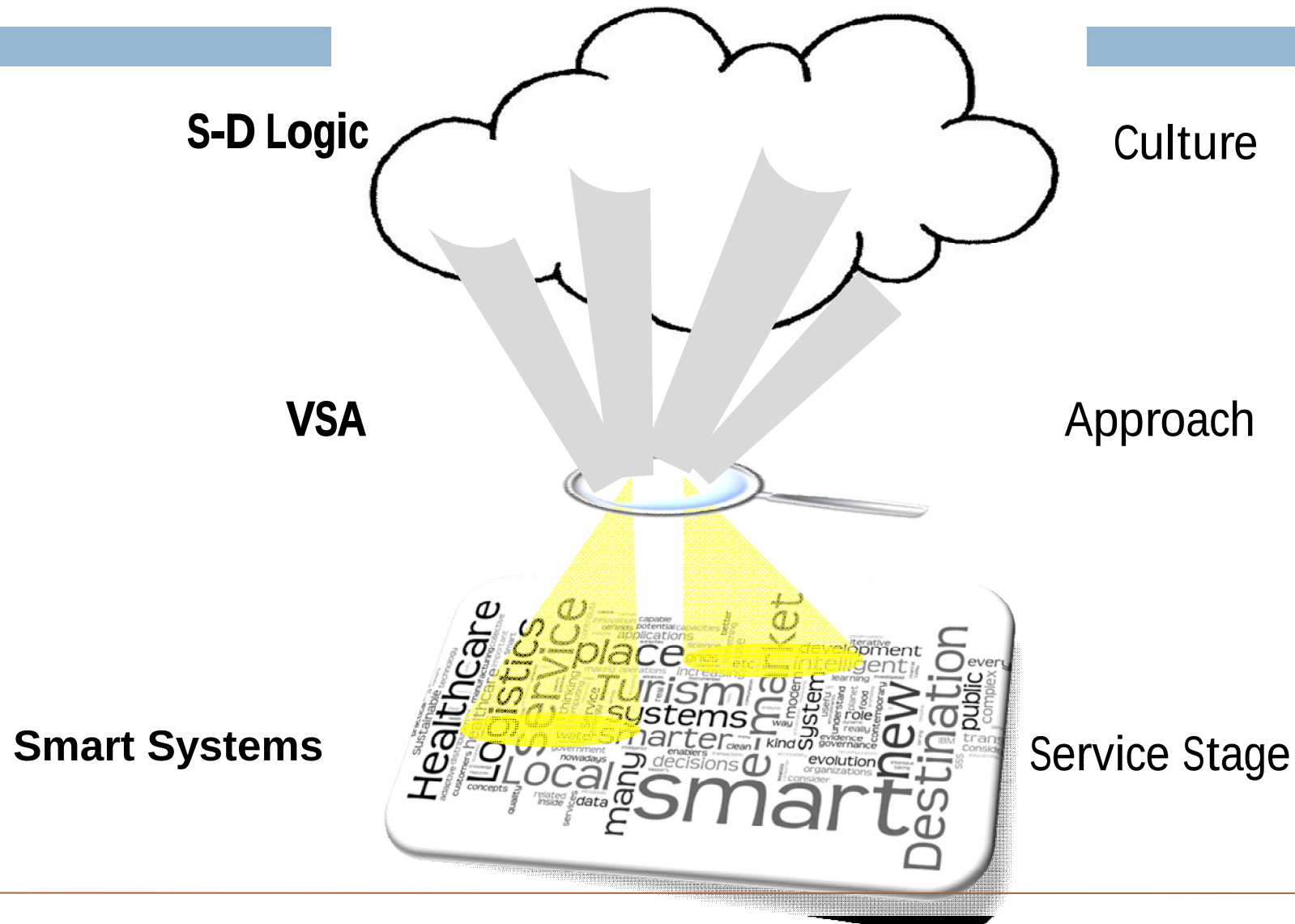
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S-D logic may be intended as a “logic”, an idea, a culture, a philosophy: in other words it is so powerful with its demanding and challenging perspective that it may be rooted in a way of thinking of scientists of many disciplines. Indeed it is a way of thinking that may support theoretical models useful for several scientific domains, particularly in social sciences.

Based upon systems theory, valorizing interdisciplinary contributes from biology, cybernetics, sociology and others, **Viable Systems Approach** proposes a interpretation key, a methodology capable of understanding complex phenomena characterizing the world today.

Synthesising S-D logic and SS through vSA

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VSA may synthesize an approach capable of bridging S-D logic culture into its service research ground.

VSA Implications for marketing theory

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VSA fundamental concepts	Implications for marketing theory
FC 1: Systems approach	Customers, business, communities, and actors can all be seen as systems.
FC 2: Systems hierarchy	Every actor (system) in a market is a resource integrator that coordinates its own resources (components/sub-systems) and a set of acquired/available resources (released by supra-systems).
FC 3: Reductionism and holism	A full understanding of the market and the co-creation interaction requires <i>both</i> an holistic view of the whole <i>and</i> the analysis of individual elements and their relationships.

VSA Implications for marketing theory

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VSA fundamental concepts	Implications for marketing theory
FC 4: Open systems and systems boundaries	Modern marketing theory recognises that enterprises do not create value in isolation. There is now appropriate recognition of the roles played by multiple actors and interested parties in various value co-creation processes within a customer balanced centrality. The notion of co-creation is inherently associated with vanishing boundaries between actors within markets.
FC 5: Autopoiesis, homeostasis, and self-regulation	In pursuing its ultimate goals, every business requires the internal capacity to evolve and self-regulate in order to adapt to external changes and survive in the long term. Businesses constantly strive to meet market requirements by changing their value propositions.
FC 6: Structures and systems	Every actor has a structure (set of capacities) that must be organised to meet the demands of the market. In so doing, businesses are transformed from static structures to dynamic systems.

VSA Implications for marketing theory

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VSA fundamental concepts	Implications for marketing theory
FC 7: Consonance and resonance	Consonance (potential compatibility between systems elements) and resonance (harmonious interaction among actors in service interactions) well represent a model describing ideal and rewarding co-creation exchanges among actors of service experiences.
FC 8: Systems viability	Every actor in a market attempts to behave in a viable, sustainable, and harmonious manner in pursuit of its own goals.
FC 9: Adaptation and relationship development	Service systems seek to establish positive and harmonious interactions with other systems to strengthen value co-creation processes and experiences. Positive interactions between providers and customers are dynamic and always changing as subjective judgments vary with time.
FC 10: Complexity and decision-making	Marketing theory is increasingly focused on networks of relationships within which interactions take place. The complexity of such networks is a problem in terms of the knowledge and cognitive alignment that is required between the decision-maker's system and the observed reality.

Comparison of marketing paradigms

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Paradigm	Focus	Main aspects	Final purpose	Point of view
Traditional 4P	Transactions	Client acquisition	Market share in short run	Internal (business unit)
Relationship marketing	Relationships	Cooperation	Competitiveness in long run	External (relational)
Many-to-many marketing	Networked interactions	Customer-balanced centrality	Network reinforcement	External (reticular)
S-D logic	Service	Co-creation	Competitive adaptive actors	Both internal and external
VSA	Systems	Viability	System survival	Both internal and external (systemic)

VSA® ...insights for service research

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- **Have I introduced the concepts of:**
 - Customer satisfaction and sustainable behaviour?
 - Co-creation?
 - Service exchange?
 - Complex engineering systems design and management?
 - Smart service systems?
 - Service & Complexity?
 - Service & Systems?

We believe all VSA fundamental concepts and principles are really suitable to stimulate Marketing Theory advances!

THANKS FOR YOUR ATTENTION!

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