Abstract:

- **Purpose:** This paper proposes to incorporate marketing and management relational theories under the umbrella of the ecosystem theory. The ecosystem theory apprehends relational phenomena integrating the micro, mezzo and macro of an open system and considers the ethical and sustainable elements for its equilibrium.

- **Design/methodology/approach:** This paper proposes an integrative literature review and discusses current paradigms in marketing and management.

- **Findings:** Three major challenges have been identified: (1) the empirical complexity of the social processes (2) the integration of a tri-dimensional vision of the social phenomenon (the “What”), the modus operendi (the “How”) and its context (the “Why”), and (3) the philosophical complexity of envisioning integrative and convergent theories.

- **Research limitations/implications:** The ecosystem theory proposes an open vision of the whole network respecting the equilibrium among the economic, the social exchange and the ecology for a long term performance.

- **Practical implications:** The ecosystem theory provides, for academicians and decision makers, new means of transforming: (1) the thinking process, (2) the research methodology, (3) the empirical representation and (4) the performance measures.

- **Originality/value:** This paper is innovative by being the first to integrate several emergent paradigms in a dialectic perspective.

- **Key words:** Ecosystem, Network, Service Dominant Logic, Marketing and Management of Services, Relational Exchange Theory.

- **Paper type:** Conceptual/literature review
Introduction
The XXIst hyper-modernism (Lipovetsky, 2004) calls for new theories in Marketing and Management Services in order to grasp the complexity of the relational phenomena using epistemic foundations as opposed to empirical testing. We argue that the complexity of the chaotic and dynamic phenomena requires an “umbrella” theory with a broader perspective on how we view relational theories. Three major challenges have been identified: (1) the empirical complexity in representing the social processes (interactions, networks or relations), (2) the integration of a tri-dimensional vision of the social phenomenon (the “What”), the modus operandi (the “How”) and its context (the “Why”), and (3) the vision of an integrative and convergent theory to help researchers and business decision makers.

Indeed, many paradigms have emerged: the Network Theory, the Service Dominant Logic, Relationship Marketing, Relational Exchange Theory, Service Science, Open Innovation, Coopetition and Customerization. The common denominator among these theories is the study of relational phenomena around the notion of interaction and relation among actors. Therefore, an ecosystem theory could serve as a catalyst to offer concrete solutions to academicians and decision makers in order to provide the basis for: (1) an evolving thinking process, (2) adopting different research methodologies, and (3) representing qualitative and quantitative empirical findings. To answer partly these challenges, the following questions are addressed: (1) What is an ecosystem?; (2) Why linking together existing theories on relational phenomena in marketing and management services?; (3) What could be proposed in terms of physical structure to understand and explain the interactions among socio-economic actors?; (4) How the biological modus operandi will impact the present relational reality? (5) In view of the empirical complexity and methodology, what are the epistemic challenges for the ecosystem? and; finally (6) What are the proposed theoretical fundamentals of the ecosystem theory?

1.0 What is an ecosystem?
The “Ecosystem” is a combination of physical and biological interactions forming a unit within an environment (Roy Clapham, 1930 cited by The WICE article on Ecosystem
concept, 2009). Eugene Odum (Nobel Price) adds, in a given area, all of the organisms (i.e. the “community”) interact with the physical environment. The flow of energy leads to defined trophic structure, biotic diversity, and material cycles. The exchange of materials between living and nonliving parts within the system is an ecosystem (Odum, 1971). Divisions between ecosystems are less important than the linkages between them: grasslands, forests, agro ecosystems, fresh water systems and coastal ecosystems (World Resources Institute, 2000: 11). An ecosystem is “organic”, “chaotic”, “systemic” and forms its own “structure” into a fragile equilibrium.

The ecosystem can be healthy or become stale and rotten if not well nurtured and oxygenated. However, the respected ecosystem can auto-regulate itself. It requires equilibrium between the human, the rational and the ecological entities (Senge and Carstedt, 2001). Like nature does, it adapts itself in balancing life creation, innovation to the evolving conditions. Eventually, the growth leads to a point of maturity, death and new birth. The Gund Institute for Ecological Economics (University of Vermont, USA) develops, test and implement innovative methods and models that integrate the social, built, natural and human capital. Projects are conceived around the equilibrium of live organisms that nurture in their sphere and are linked to other organic elements. The waste of one feeds the growth of the other and all elements are interdependent to the final transformation of life and energy into the profitable production.

The ecosystem is also used as a metaphor to explain the need for business markets and non-business institutions to establish an ecologic equilibrium. In services, there are many compatible theories useful to inspire the ecosystem equilibrium. The open network (Chesbrough, 2003) illustrates the new firm dynamic and frontier. The coopetition (Brandenburger and Nalebuff, 1996) describes the paradox of cooperation among competitors. The open network or customerization (Wind and Rangaswamy, 2000) empowers customers and partners in the open innovation process (Chesbrough, 2003). Service science views individual and the micro, mezzo and macro of the service system together with the objective of enhancing value creation and win-win equilibrated exchanges (Maglio and Spohrer, 2008).
Observations of the social network and behaviours that later develops into politics, management regulations and outcomes are difficult to measure “rationally” and “objectively”. However, the integration of compatible theories on the social and relational phenomena provide richer and more pertinent conditions that represent the ecosystem theory. Thus, like the natural ecosystem, the business ecosystem distinguishes itself by the chaotic dynamic, the complexity and interdependence of relations in the socio-economic systems (Moore, 1996; Iansiti and Levien, 2004; Ben Letaifa, 2009; Ben Letaifa and Paulin, 2009; Ben Letaifa, Paulin and Rabeau, 2009).

2.0 Linking the theories on relational phenomena: What is the purpose?
The ecosystem theory proposes an open vision of the whole network respecting the equilibrium among the economic, the social exchange and the ecology for a long term performance. Recent global economic and social crisis question the short-term opportunistic and guile behaviours of the firm and its representatives creating a disequilibrium between the “human relation” (customer, employee or citizen) and the ecology equilibrium. In fact, hypercompetitive markets create social, economic and ecological disturbance (Eisenhardt, 1989; Rindova and Kotha, 2001). They also encourage cooperative and emergence of relational movement (Normann and Ramirez, 2003) through open source networks (Gummesson, 2007) and ecosystems (Moore, 1996; Iansiti and Levien, 2004). Advanced wireless technologies modify the global economy landscape forcing companies to open and democratize their management, marketing and information sharing style (Tapscott and Williams, 2007). As a result, network converge (Anderson and Narus, 2009) and provide stakeholders with the power to co create (Gummesson, 2008).

Many theories have looked at these interactions and relations. In management, they refer to coopetition (Brandenburger and Nalebuff, 1996), open strategy (Chesbrough and Appleyard, 2007), value constellation (Normann and Ramirez, 2003), open network linking actors, resources and activities (Håkansson and Johanson, 1992; Håkansson and Snehota, 1995). In marketing, they are identified by relationship marketing (Aijo, 1996),
service dominant logic (Vargo and Lusch, 2004), network theory (Morgan and Hunt, 1994), relational exchange theory (Macneil, 1980; 1983), interfirm exchange governance (Cannon, Achrol, and Gundlach 2000), reciprocal nature of value co-creation (Paulin and Ferguson, 2009) or total relationship marketing (Gummesson, 1999; 2002). These perspectives favour collaboration (Lado, Boyd and Hanlon, 1997) and cooperative mode with the whole community (Chesbrough and Appleyard, 2007; Webster, 1992). The emphasis is on collaborative exchange of services (Vargo and Lusch, 2004) and wealth is created through the balance of social wellbeing and values other than micro economic and short-term transaction outputs (Moore, 1996: 48).

3.0 The physical structure of the Ecosystem: The network theory
A network is defined as a set of nodes represented by people, organizations, interactions and relations (Gummesson, 2007). Network are also “complex organizational structures that result in multiple strategic alliances combined with other organizational forms, including divisions, branches and resellers at high added value” (Webster, 1992). These mega structures are interdependent, the actors interact and cannot be maintained in status quo. A socio-economic actor is linked to at least one network that is itself attached to another ecosystem. Status quo is synonymous of death or rejection in the ecosystem (Moore, 1996: 233). The challenge is to find the equilibrium in the fluctuation between order and disorder (Brown and Eisenhardt, 1997) and capture the complexity in a theory that incorporates dynamic phenomena (Gummesson, 2006) rather than observing and measuring static elements using transactional cost analysis, agency theory or ecologic population (Brown and Eisenhard, 1997).

The network theory is part of the chaotic and dynamic complexity because it provides the necessary thinking for understanding that many variables interact, a number of situations are singular and there is a constant and recognized change. Processes are dynamic and non linear (Gummesson, 2007). The ecosystem theory enriches the network theory because relationships are analyzed in their context, complexity and taking into consideration the evolution of the processes. Moore (1996: 25) describes the three levels of the dynamic, relational and interactive business ecosystem to ensure its performance:
(1) the workmanship core (competence, suppliers and distributors), (2) the enlarge enterprise (suppliers’ supplier, direct customers and their customers, standards and product-service suppliers, complement services) and (3) the global ecosystem (peripheral actors like governmental agencies, universities, interested parties, business process and other organizational arrangements) (Figure 1). The structure of the ecosystem integrates the suppliers, distributors, creditors, technology providers, agency regulators and political entities, producers of complementary products, partners and outsourcing, competitors, media relations, employees and customers (Moore, 1996; Iansiti and Levien, 2004).

The network theory has a double function, a technical representation and an explanation theory of the relational phenomena (Gummesson, 2008). In Marketing, concepts and definitions have emerged to explain these levels of relationship phenomena: macro-marketing and societal role of marketing (Vargo and Lusch, 2008b), “holistic marketing logic” (Ballantyne and Varey, 2008), “global economy” (Maglio and Spohrer, 2008) or total relational marketing (Gummesson, 2002). The total relational marketing includes the supplier customer dyad, relationships to a suppliers’ own suppliers, to competitors and to middle manager; furthermore, relationships are found a step above market relationships, to public authorities, media, and the other entities in society (Gummesson, 2002). At an ecosystem level, all peripheral actors are incorporated with a broader, systemic and comprehensive view of management and social context (Gummesson, 1999: 24). The ecosystem incorporates the physical structure of all existent networks in one or more industries and their biotic functional mode. It promotes a methodology with a triadic vision of the why, what and how (Ben Letaifa, 2009).

4.0 Biological modus operandi: Relational reality
Have we succeeded in our definitions and applications of relational theories in Management and Marketing Services? In a context of value crisis, “relationship is not an
“Service stinks” (Brady, 2000) and the cult of “efficiency” supersedes common sense (Gross Stein, 2001). Although a few organizations do succeed with a customer focus strategy (Berry, 2004; Berry and Carbone, 2007), most organizations have moved from “serving the customer” to “enslave the customer”. The majority of businesses advocate for “customer loyalty and customer experience” but manage short-term “nightmares” (Paulin, 2009). The ultimate question is how customers feel about the service and how willing they are to recommend it to other parties which can only happen if organizations are ethical and “fair” in their offerings (Reichheld, 2006).

From a conceptual and theoretical point of view, relationship marketing has been for a long time viewed in a traditional dyad (supplier-customer) with a dominant logic on product and static service characteristics, the Good-Dominant Logic (G-D logic) (Vargo and Lusch, 2004). The migration towards a service relational perspective win-win is necessary at the dyadic microscopic level (individual-organization), the mezzo (enlarged organization) and the macroscopic vision or ecosystem (the whole environment) and becomes possible if there is a new relational perspective, favourable to all parties (Morgan and Hunt, 1994; Grönroos, 2000; Payne, Ballantyne and Christopher, 2005) and nourishing itself from the biologic ecosystem metaphor (Moore, 1996; Iansiti and Levien, 2000; 2004).

S-D logic comes primarily from the research streams of services and relationship marketing (Ben Letaifa, 2009; Paulin and Ferguson, 2009). Exchange is viewed as the process of doing things for and with each other, rather than trading units of output, tangible or intangible (Vargo and Lusch, 2008b). The notion of reciprocal provision of service-for-service and the mutual creation of value makes exchange inherently interactional, collaborative and relational (Vargo and Lusch, 2004; 2008a). Philosophically grounded in commitment, collaborative processes with customers, partners and employees (Lusch, Vargo and O’Brien, 2007). It requires a different mindset for examining the social and economic phenomena of exchange (Vargo and Lusch, 2004; 2008a; 2008b). Exchange is inherently relational and service (knowledge and skills) is
the fundamental basis of exchange as well as the source of value creation. Value is a) reciprocal in nature, b) co-created by the parties to the exchange and, c) always and uniquely determined by the beneficiaries, d) moving away from tangibles to intangibles, operand to operant resources, asymmetric to symmetric information and treatment, value added to value co-creation, and transactional to relational orientations (Vargo, Lusch and Matler, 2006) (Table 1).

Table 1
Comparison between Good-Dominant Logic (GDL) and the Service-Dominant logic (SDL) synthesis from Vargo and Lusch (2004; 2008a; 2008b)

<table>
<thead>
<tr>
<th>Good-dominant Logic (GDL)</th>
<th>Service Dominant Logic (SDL)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Focus on units of output</td>
<td>Focus on processes</td>
</tr>
<tr>
<td>Horizontal difference between services and goods</td>
<td>Vertical relationship between service and goods</td>
</tr>
<tr>
<td>Value in exchange</td>
<td>Value in use</td>
</tr>
<tr>
<td>Established logic</td>
<td>Emerging logic</td>
</tr>
<tr>
<td>Exchange in terms of transactions</td>
<td>Exchange in terms of relationships</td>
</tr>
<tr>
<td>Operand resources</td>
<td>Operant resources</td>
</tr>
</tbody>
</table>

Opposite view between the S-D and G-D logics are also mirrored to a great extent by Relational Exchange Theory (RET) and Transactional Cost Analysis (TCA) respectively (Paulin and Ferguson, 2009). Relational exchange theory (RET) and transactional cost analysis (TCA) have been the dominant theoretical perspectives employed in the study of interfirm exchange governance (Cannon, Achrol, and Gundlach, 2000; Ferguson, Paulin, and Bergeron, 2005; Rindfleisch and Heide, 1997). Macneil’s (1980; 1983) evolution on relational contract (exchange) theory is highly consistent with the S-D logic (Vargo, Lusch and Matler, 2006). In fact, Macneil (1983) emphasizes that exchange is virtually always relational and based on the inseparable principles of reciprocity and solidarity (trust). TCA focuses on a firm’s transactions, with transactions as the unit of analysis. The emphasis is on the cost, the efficient structuring and management of the exchange (Williamson, 1975; 1985). Examples of the transactional cost analysis application in management models include strategic alliances, joint ventures, value-added partnerships,

5.0 Empirical complexity and methodology: Epistemic positioning

The choice of an ecosystem theory requires to view the exchange in a more global and systemic vision and in its whole complexity without simplifying, isolating or reducing variables in their contexts. It integrates all elements (economy, politic, society, nature, technology) and industry specificity (competitors’ characteristics, innovation, markets, customers) in a temporal dimension that reflects the evolution of social economic processes, human well-being and ecology balance to create further wealth and long-term development.

However, academicians and business decision makers have a hard time to configure the equilibrium between the dyad (micro level of the relationship between two parties) and the triad (micro level of the relationship incorporating a third party to the equation). There is no clear understanding of how relationship marketing incorporates the network dimension (Gummesson, 1994) or the network calls for integrating relationship marketing (Morgan and Hunt, 1994). Scholars struggle collectively to conceptualize and measure what is in fact a relationship strategy and what a relationship strategy entails in terms of collaboration of the network and equilibrium in the whole system. How can we talk and educate business people about the need to trust, commit and collaborate in the network? How can we promote equilibrium among economic factors, ecological balance and social wellbeing? How can we ensure benefits as well as accountability and responsibilities of all parties?

Many authors in Marketing and Management have already used the iceberg theory to illustrate the observed social processes complexity (Allaire, 2008) and demonstrate the importance of triangulation (review of interdisciplinary theories and methods) in order to gain 85% of the uncover part of the iceberg (Gummesson, 2003: 32). For many reasons
(rational, political, personal, passionate, intellectual, spiritual, philosophical or all of them), researchers favour some theoretical and methodological aspects rather than others to explain relational processes which explains that few transversal research have integrated different paradigms. Although hard to admit by scholars who diligently write about relationship marketing, relationship management in interfirm exchanges, relational performance and benefits, there is a great resistance in accepting a broader view than a “single-firm” perspective. Measures extracted from the Transactional Cost Approach (TCA), mail surveys or simulated environments with students are used to look at the service provider side focusing on “tangible” product exchanges and scarcely even consider both perspectives or values in the partnership (Paulin and Ferguson, 2009).

Thus, the ecosystem is a way to perform a relationship marketing and management service strategy. It is a structure and a philosophy but cannot take place unless the exchange structure provides opening, collaborative commitment in the social exchange where trust, commitment, accountability and responsibility are part of the deal. Allaire and Firsiootu (2003) insist on the importance of the culture coherence, structure and individuals in the organization. The relational culture requires harmony with the mental of individuals and the organization design. The philosophical relation is in the feeling and the structure of all socio-economic actors in the ecosystem. The ecosystem perspective has the potential to be: 1) a culture, 2) a mental framework and, 3) an organizational design to facilitate relational marketing. The service works well when the organization functions in an internal ecosystem in symbiotic mode with the global system. As an example, the case of UbiSoft or PeopleSoft (before acquisition by Oracle), supplier of CRM solutions demonstrates that success depends on the capacity to include internal and external customer relations in the creation process, the innovation and the business development (Ben Letaifa, 2009).

6.0 What are the proposed theoretical fundamentals of the ecosystem theory?

The ecosystem theory enriches the Service Dominant Logic that takes on principles from the Relational Exchange Theory. The S-D logic shifts the unit of analysis from the firm to the dyad or network (Vargo and Lusch 2004; 2008a; 2008b) but it needs to specify its
levels of application at the social and macro levels (Vargo and Lusch, 2008a). Through the analysis of twenty-five years of empirical research, Paulin and Ferguson (2009) demonstrate the complementarities between Relational Exchange Theory and the Service-Dominant Logic in order to capture the dynamic of interfirm service exchanges and, in particular: (1) the linkage between relational norms, trust, commitment and exchange performance, (2) the association of relational norms, the differential value created and phenomenologically formulated by more than one party to the exchange (dyadic and network) and, (3) the development of relational norms as a resource competence of personnel, the organization and the exchange. Both of these theories emphasize “processes”, “servicing”, “win-win exchanges” at a micro perspective.

Although Macneil mentions supra-contract norms and the need for norms of accepted and expected sentiments and behavior shared by members of an exchange system as a force of social obligation or pressure (Macneil 1983), no one has looked at the impact of these supra-norms or no supra-norms on the whole ecosystem. While the S-D logic offers an important contribution by reinforcing the notion of « co creation » and « reciprocity » of value between the customer and contact personnel, the service being the process rather than the product of exchange (Vargo and Lusch, 2008a; 2008b), to our knowledge no studies have looked at the « healthy » or « unhealthy » impact of the ecosystem on the relational exchange and how they evolve in an ecological and social framework.

The ecosystem theory takes a step further by suggesting an integration of the micro, the mezzo and the macro perspectives without neglecting the ecological and social impact of the homo civilis in opposition to homo oeconomicus (Ben Letaifa, 2009). It invites scholars from Management and Marketing Services disciplines to envision ecological, ethical and social views of the relationships taking into consideration many levels of interactions and actors and the impact on various systems. Along with the SDL and the relational exchange theory, the umbrella theory of the ecosystem brings together the Network Theory, Open Innovation, Coopetition and Customerization responding to an empirical crisis and an interdisciplinary gap in the Management and Marketing Services
literatures. It offers business models and options to decision makers without excluding any input from other disciplines.

**Table 2:**

**Service dominant logic key principles (adapted from Vargo and Lusch, 2008b)**

<table>
<thead>
<tr>
<th>Principle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service is at the base of all exchanges (directly or indirectly through goods).</td>
</tr>
<tr>
<td>Exchange is by definition relational and oriented towards the customer.</td>
</tr>
<tr>
<td>The customer and the company co create value through reciprocal services.</td>
</tr>
<tr>
<td>The company proposes value but the customer actualize it.</td>
</tr>
<tr>
<td>Value is determined uniquely by the customer through its service experience.</td>
</tr>
<tr>
<td>People and knowledge are investment susceptible to increase rather than expenses to exploit, use or consume.</td>
</tr>
</tbody>
</table>

The ecosystem theory has for unit of measure the relation in its global entity (micro, mezo and macro) rather than looking at the service in particular. It considers the relation to be the social process that will guide the service process. Imported from the S-D logic, service is a socio-economic process in the context of the market. The relation in the ecosystem theory is the social process in a durable and dynamic ecosystem. The relation is defined like a social contract regulated by ethical and ecological norms that co-evolve with the socio-economic actors (Table 3). The ecosystem theory is inspired by the biology metaphor and the equilibrium of participants in the relations. The system is “alive” and is the fruit of collective “responsibilities” and “autonomy” of the socio-economic actors.
### Table 3:

**Theoretical proposition of the ecosystem**

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Propositions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relation</td>
<td>The relation is the fundamental unit of the ecosystem. It is defined as the social contract regulated by ethical and ecological norms that co evolve with the needs of the socio economic actors.</td>
</tr>
<tr>
<td>Ecosystem</td>
<td>The open system network of socio economic actors evolve in a relational dynamic. Rewards are more relational and must be measured by leadership delegation, praising and social capital reinforcement.</td>
</tr>
<tr>
<td>Values</td>
<td>Values define interactional norms: Relation, duration, ethic, ecology</td>
</tr>
<tr>
<td>Ecology</td>
<td>New vector for innovation</td>
</tr>
<tr>
<td>Ethic</td>
<td>Code of conduct of the ecosystem</td>
</tr>
<tr>
<td>Co creation</td>
<td>Relational process</td>
</tr>
</tbody>
</table>

A few propositions indicate some dimensions associated with the open ecosystem exposing what is meant by: relation, ecosystem, values, ecology, ethic and co-creation (Table 4). The etymology of the terms express openness and cooperation recognizing the competitive context that corresponds to the logic of ecosystem. The strategic importance of collaboration and global wellbeing supersede the vision self-centred, opportunistic and individualistic behaviours. The concept of co-production becomes co-creation of value and experience. Ecosystem replaces environment, industry and market. Partnership or strategic alliances evolve towards open innovation and coopetition. Long-term vision is defined as durable or sustainable and integrates respect of the ecosystem and the ecology equilibrium. Finally, all living entities including wild life, life organism in nature, and all socio-economic actors (individuals, citizens, organizations) are a priority for the “equilibrium” and the dynamic of the system.
Table 4:
Concepts and terminology for the ecosystem theory

<table>
<thead>
<tr>
<th>Concept</th>
<th>Proposed Terminology</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environment/industry/market</td>
<td>Ecosystem</td>
</tr>
<tr>
<td>Coproduction</td>
<td>Co creation of value/Experience</td>
</tr>
<tr>
<td>Partnership</td>
<td>Open Innovation</td>
</tr>
<tr>
<td>Network</td>
<td>Open Network</td>
</tr>
<tr>
<td>Strategic alliance</td>
<td>Coopetition</td>
</tr>
<tr>
<td>Long term vision and performance</td>
<td>Sustainable logic/Relational exchange theory/SDL</td>
</tr>
<tr>
<td>Involved Parties</td>
<td>Socio-economic actors</td>
</tr>
<tr>
<td>Marketing of products or services</td>
<td>Relational Marketing</td>
</tr>
</tbody>
</table>

7.0 Conclusion, limitations and implications for business practitioners

“Relationships, after all, are the one thing you can’t commoditize” (Tapscott and Williams, 2007: 44). However, in marketing, empirical evidence has demonstrated its own limitations and challenges to researchers and business practitioners (Paulin and Ferguson, 2009). In management, looking at relationships, models and methods may not be adequate to apprehend the complex reality of the XXIst century (Ben Letaifa, 2009; Ben Letaifa and Paulin, 2009; Ben Letaifa, Paulin and Rabeau, 2009).

The S-D logic and the relational exchange theory explain how marketing affect the market and its creative processes (Vargo and Lusch, 2008b) but there is a need to integrate concepts from Marketing, Management and other disciplines to gain an holistic vision. The ecosystem theory is a metaphor to inspire the understanding of the socio-actors (organizations, citizens, government and others) in a logic of equilibrium. The equilibrium although hard to obtain and maintain, is the source of respect, harmony, wellbeing and “fairness”, away from the maximization of surplus and consumer products (Chesbrough and Appleyard, 2007).
The ecosystem theory is a framework integrating many inter-related and integrated levels (Moore, 1996). It has the potential to develop a general theory of relations and provides: (1) a systemic dimension to observe relations over time, (2) a perspective integrating the interdependency among actors including natural environment of the ecosystem in an equilibrated form, (3) precisions on ecological and ethical dimensions of the relational development, and (4) delimitations of actors in order to learn how to better co-evolve to innovate and grow together.

The question is, do we wait for a catastrophic situation to wake up or do we, with « solidarity », proactively do something about it? For researchers, there is an urgent need to co-innovate from theory development, methodologies, measures and performance evaluations. For decision makers, it is one thing to talk about values but it is another to evaluate them in the whole ecosystem. Economic, ecologic and social well-being values should be part of the corporate strategy and managers need to learn know how to use them (Noel, 2009). Private or public institutions would gain on relying on ecosystemic values to foster personal and organizational attitudes in the everyday interactions and in crisis situations. Whether it is in the business market, politics, legislation application or in the research domains, rewards and remunerations systems need to be ecosystemic oriented and designed to favour the cultural and necessary move to more equilibrated relationships and networks. Management, communication, and routine tasks should be inspired by the question “What is my ethical mission? Are my actions rooted in the ecosystemic values? How can I accomplish them?” (Noel, 2009).

References


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Figure 1
Business ecosystem (adapted from Moore, 1996: 27)