

Working Paper

WP No 616 January, 2006

THE "SPONGE" ORGANISATION: A CREATIVITY-BASED REFLECTION ON THE INNOVATIVE AND SUSTAINABLE FIRM

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Published by CBS - Center for Business in Society

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Abstract

Nowadays, many companies striving for sustainability have developed new and effective communication channels with their stakeholders and, at the same time, successful innovation strategies. However, stakeholder engagement and innovation tend to be managed as parallel rather than interconnected activities within companies, and any link between them seems to be informal and tacit. The aim of this paper is to gain a deeper understanding of how companies' relationship with the environment can be harnessed for sustainable innovation. Given the scant experience of companies linking stakeholder dialogue and sustainable innovation, we decided to adopt an original and innovative research method based on gathering a group of managers from different companies and stimulating their imagination using creativity techniques. In this paper, we first describe the creative research method we used to explore how businesses can integrate stakeholder insights into the process of organisational innovation. Then we present the result of our research experiment: the model of the "sponge" organisation. Based on the experience and intuitively stimulated ideas of the project participants, we propose a definition, a list of values and principles, and important "hard" and "soft" attributes of the ideal enterprise, i.e., one that uses its relationship with the environment as an essential innovation factor. Finally, we discuss the implications of this business concept and compare it with existing management literature.

Keywords: sustainable development, stakeholders, environment, innovation, creativity

JEL classification: M14, O31

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Introduction

In the context of increasing social and environmental pressure, innovation is one of the primary means by which companies can achieve sustainable development. However, creating a sustainable way of life on a planet with limited resources and an expanding population will require some fundamental changes in traditional innovation approaches. Following Schumpeter's idea of "creative destruction", many management scholars argue that competency-enhancing incremental innovation is insufficient to meet sustainable development; instead, competency-destroying radical innovation is needed. For instance, Hart and Milstein (1999) argue that managers must fundamentally rethink their views about strategy, technology and markets in order to capture sustainable business opportunities. This pursuit of more sustainable products, processes and business models requires a shift in mental models, such as adopting the logic of natural systems and a learning culture (Senge and Carstedt, 2001). Hall and Vredenburg (2003) affirm that sustainable development innovation is more complex than conventional, market-driven innovation, because it has to consider a wider range of stakeholders and their often contradictory demands.

In essence, today's companies need to innovate by reinventing the way they relate to their social and natural environment. Business must understand that it is part of society and nature, and that if it wants to ensure long-term survival, it must contribute creatively to the health of life on the planet. Openness towards the surrounding environment will allow companies to foresee avoidable damage and detect opportunities for improving environmental and social conditions. Engaging in dialogue with diverse stakeholders will help companies find out what needs and expectations they must address in order to create value. Feeding insights gained through this actively managed relationship with the social and natural environment back into the company's innovation processes will ultimately lead to sustainable competitive advantages.

Nowadays, many companies striving for sustainability have developed new and effective communication channels with their stakeholders and, at the same time, successful innovation strategies. However, stakeholder engagement and innovation tend to be managed as parallel but not interconnected processes within companies and the link between the two seems to be informal and tacit. The aim of this paper is to gain a deeper understanding of how companies' relationship with the environment can be harnessed for sustainable innovation. First, we describe the creative research method we used to explore this topic. Then we present the result of our research experiment: the model of the "sponge" organisation. We discuss the implications of this proposed business concept and compare it with existing management literature. We end with some conclusions.

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A creativity-based research method

The lack of existing business experience linking stakeholder dialogue and sustainable innovation makes it difficult to apply traditional research methods based on statistical description or case study observation of selected companies. Therefore, instead of basing our research on studying particular companies' experiences, we gathered a group of managers from different companies and used their imagination. With them, we formed a work group to generate creative ideas on how companies can integrate stakeholder insights into the process of organisational innovation, using both rational and lateral thinking procedures.

The work group was coordinated by the authors and sponsored by the Spanish companies Grupo Eroski, Iberdrola, Mutua Universal, Siemens España and Unión Fenosa, each of which assigned one or two executives to the project. Grupo Eroski, a member of Mondragón Corporación Cooperativa (MCC), is one of the leading Spanish distributors of fast-moving consumer goods and services. Iberdrola is Spain's number two electric utility company, but it also has other business activities such as distribution of natural gas, new energies, engineering, consulting, telecommunications, information technology, property and services. Mutua Universal is the third biggest insurance society for industrial accidents and occupational illnesses in Spain. Siemens España is the Spanish subsidiary of the German multinational, Europe's largest electronics and electrical engineering firm. Unión Fenosa is Spain's third largest electric utility company, combining electricity supply with other businesses such as natural gas production and supply, telecommunications, professional services, and industrial, mining, real estate, and technology investments. Of the nine project participants, four were members of the top management team of their respective companies.

During the project, which lasted four months, five working sessions were held (see Figure 1). After a kick-off meeting, a benchmarking session took place, in which the companies participating in the project had the opportunity to share their practical experiences within the field of research. These first two sessions laid the foundations of the project and prepared the ground for applying diverse creativity techniques. Altogether, three creative sessions of approximately four hours each were held. Before and after each session, we met to analyse how the session had gone and to prepare the following meeting. Because of the chosen methodology, our role was not restricted to organizing the meetings; we also took active part in them.

The general framework for the creative sessions was based on the so-called "Wishing Diamonds Technique": we started by visualising the utopian situation of an ideal enterprise, but we ended up developing concrete and realistic recommendations. The initial approach was to divide each creative session into a "divergent" part (browsing and brainstorming) and a "convergent" part (analysing and deciding). However, the dynamics of the work group led us to modify this planned methodology. While the first two creative sessions focused on the divergence and quantity of ideas generated, only the third and last creative session aimed at convergence of ideas and analysis of their practical applicability.

¹ In the literature on creativity, divergent thinking is a multi-focus activity that allows for "conflicting ideas, paradoxes, ambiguity, and doubt", while convergent thinking is seen as a single-focus activity or as "thinking that proceeds toward or converges on a single answer" (Thompson, 2003, p. 98). Creativity processes encompass both divergence and convergence of ideas.

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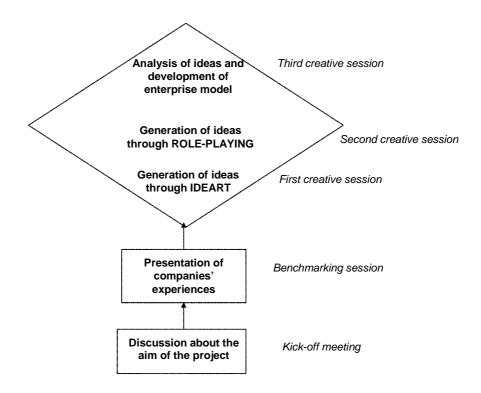


Figure 1: Project methodology based on the "Wishing Diamonds Technique"

Kick-off meeting and benchmarking session

During the kick-off meeting we introduced the concepts of sustainable and responsible enterprise, stakeholder dialogue and sustainable innovation, and the relationships among them, and explained how the creativity techniques would be used within the project. Also, the meeting allowed us to discuss the aim of the project with the participants, resolve any doubts about the methodology and set the agenda of the following meetings.

In the benchmarking session, the participating executives presented their current experience. With the help of the coordinating team, each firm prepared a short presentation about the way it currently managed the processes of stakeholder dialogue and product, service and process innovation. This session was useful for exploring the different ways in which firms can link stakeholder dialogue and innovation processes. Likewise, the exchange and discussion of initiatives helped to create a common understanding among participants and the necessary "breeding ground" to exercise imagination in the subsequent creative sessions.

First creative session: IDEART

In the first creative session we used the IDEART² creative methodology. This consists of generating ideas around a particular creative focus, using visual stimuli in the form of selected paintings. At the beginning of the meeting we did a relaxation exercise and

² IDEART was developed in 2001 by Franc Ponti by mixing and reformulating different pre-existing creative techniques, such as provocations, analogies, mindmapping and creative drawings (Ponti 2003).

various creativity exercises in order to encourage the participants to adopt an open attitude towards imagination. Then we presented the creative focus of the session:

How would an ideal company turn its relationship with the environment into an essential factor for its innovation processes?

We selected three paintings –by Hieronymus Bosch, Rousseau and Kandinsky– and asked the participants to describe the paintings in detail and think about the sensations and feelings they aroused. All the associated ideas were written down on a flip chart, so that all participants could see them. After a short break, we formed two teams, each of which tried to "force" connections (using analogies and provocations) between the ideas associated with the paintings and the creative focus. The aim was to obtain unusual angles on our problem and generate ideas. Finally, each team presented its results to the whole group.

After the session, we analysed the varied ideas and comments generated through the IDEART creativity technique. We noticed that most of the ideas were related to the values and principles that shape the culture of the ideal business that we were trying to characterise. There were ideas and comments relating, on the one hand, to our ideal company's structure and systems, and on the other, to its people and management.

Second creative session: Role-playing

In the second session we used role-playing, in which participants act out roles in order to generate ideas from other people's viewpoint. We made a list of famous people about whom we had gathered documentary and audiovisual information and sent this list by e-mail to the managers participating in the project. Each participant chose a person from the list, according to his/her preferences, and two weeks before the working session he/she was sent a short biography and a DVD on the chosen person's life and thinking (documentary or fiction). The seven participants in this meeting chose the following characters: Pablo Picasso, John F. Kennedy, Salvador Dalí, Frida Kahlo, Bill Clinton, Mahatma Gandhi, Cleopatra.

At the beginning of the meeting, we introduced some key concepts about theatrical role play,³ and each participant had the opportunity to describe his/her chosen celebrity and point out the person's outstanding characteristics. We also did several exercises to help participants get into their roles. After that, each participant talked one-to-one with each other character about the two creative foci derived from the previous working session:

What must the structures and systems of an ideal company be like for its relationship with the environment to become an essential factor for its innovation processes?

What must the managers and, in general, the people of an ideal company be like (i.e. what abilities, capacities, style, etc. must they have) for the company's relationship with the environment to become an essential factor for its innovation processes?

"Acting out" the chosen role was intended to help participants relate facts and ideas in unusual ways. We wrote down all the ideas put forward during the role play, and in the post-session analysis we confirmed that the ideas and comments generated in this exercise related to the *values* and *principles* of our ideal enterprise and what could be called "hard" (*structures* and *systems*) and "soft" (*management* and *people*) issues.

³ In preparing and carrying out of this meeting we had the assistance of Xavier Guix, a former actor who works now as a business teacher and coach.

Third creative session: Consensus-building about the enterprise model

The goal of the third session was to reach a consensus about the ideal enterprise and specify its attributes. To prepare this session, we grouped all the ideas generated in the previous sessions that were consistent with the project's research focus.

Some of these ideas concerned metaphors of the enterprise and could be regarded as images of the kind of company that uses its relationship with the environment as an essential innovation factor. We devised a list of ten metaphoric ideas and sent it by e-mail to the project participants, asking them to vote on the ideas, according to how imaginative, suggestive or interesting they found them. Each participant had a total of 100 points to distribute freely among the ten general ideas about the new conception of enterprise.

In the working session, we presented the result of the voting and proposed a definition of the enterprise model, based on the most voted ideas and a list of the values and principles derived from them and consistent with this business definition. To reach maximum consensus about the enterprise, we discussed these concepts with the project participants and tried to find a wording that was acceptable to everybody (see below). We then handed each participant a list of the creative ideas from previous sessions, grouped under the headings Management, Structure, Systems and People. We formed two working teams, each of which tried to specify the elements of the new company model in more detail.

The model of the "sponge" organisation

The definition agreed by all project participants describes the firm as a sponge, since one of its main abilities should be to absorb all relevant information and transform it so as to secure its own survival and continuity.

Definition of the "sponge" organisation: Spongy, porous, distributed and adaptable organisation that seeks difference and promotes

Spongy, porous, distributed and adaptable organisation that seeks difference and promotes collaboration, beauty and happiness.

The evocative image of the enterprise as a sponge reminds us of the popular metaphor for organisations as organisms. Unlike the prevailing view of the enterprise as separate from the social and natural environment, this view of the firm as a living system stresses the fact that the firm depends on the surrounding environment for various kinds of sustenance. This symbiotic vision is a basic idea of the sustainable enterprise and illustrates very well the relationship a firm should have with its social and natural environment: being in continuous exchange (porous), interacting constantly (distributed), and adapting to changing circumstances (adaptable). In order to meet the requirements of the environment – especially if the environment is uncertain and turbulent – and survive in the long run, organisations need to innovate (seeking difference). However, the company we are trying to characterise should focus not only on survival but also on being responsible; in this sense, it should contribute to the improvement of the socio-physical system it belongs to. This means harmonizing the needs of organisations with the needs of the human beings that interact with them. In contrast to the widespread tendency to ignore the social dimension of work, the view of the company as a "sponge" emphasises the fact that organisations have to create conditions that allow employees at all levels to grow as persons and build relationships inside and outside the company (collaboration). At the same time, the "sponge" company reminds us that the

ultimate aim of any company is not to earn money but to improve people's life and well-being (beauty and happiness).

We have translated the definition of this "ideal" organisation into a series of values and principles that can guide companies in practice. Figure 2 shows the values and principles that were accepted by all the project participants. They can be grouped in three interrelated dimensions: relationship with the environment, innovation, and organisational principles.

Figure 2: Values and principles of the "sponge" organisation



Relationship with the environment

- •To be one with the environment
- •To engage in dialogue with an open mind
- •To be transparent and authentic
- •To have a cooperative attitude
- •To look for difference and singularity

Innovation

- To be inclusive, to look for and to appreciate diversity
- •To take nature as a basic source of inspiration
- •To promote creativity, trial and innovation
- •To consider that unlearning and making mistakes are part of the learning process
- •To consider innovation to be everybody's concern and to use it to improve the environment

Organisational principles

- To promote holarchy, basing power on merits
- •To work in a team
- •To have an attitude of permanent questioning
- •To have a healthy ambition, to try to leave a mark
- •To promote beauty and happiness

Relationship with the environment

The relationship of the "sponge" organisation with its social and natural environment reflects, on the one hand, that the company recognizes itself as part of this environment and, on the other, that it is aware of the different and singular role it plays in this bigger system. That is to say, the relationship with the environment is based on a combination of a sense of belonging and a sense of uniqueness. Both values are equally important. Without a sense of belonging, companies are unable to feel or understand their mission with regard to the system of which they are a part. Without a sense of uniqueness, companies would not have the right mindset to contribute in distinctive ways to the betterment of the system.

A specific way for companies to relate to their system is through their relationship with all possible stakeholders, including non-traditional stakeholders such as the poor, weak, isolated, non-legitimate and even non-human (Hart and Sharma, 2004). In contrast to a purely competitive, defensive, reactive or top-down approach to stakeholder management, the "sponge" organisation's interaction with its various stakeholders is based on a cooperative attitude. Stakeholder engagement is grounded in the intention to engage in dialogue with an open mind, be transparent, authentic, and ready and willing to learn from

the information exchange. For the "sponge" organisation, its various ways of interrelating with stakeholders are a fundamental realization of its values and a way to create value for the company itself and the system it belongs to.

Innovation

Nature has been evolving since time began and has found ways to adapt and prosper in the most diverse situations. As a result, nature has accumulated the richest knowledge and experience and the finest answers to the most difficult and various circumstances. Therefore, the innovation values of the "sponge" organisation highlight the importance of taking the rich and diverse environment as a basic source of inspiration, but also, in accordance with the sense of belonging and uniqueness, as the ultimate beneficiary of innovation.

In the "sponge" organisation, innovation involves everybody. Innovation-related principles are oriented towards creating the right organisational atmosphere to stimulate creativity, experimentation and learning. The "sponge" organisation is aware that learning involves unlearning, that creation implies destruction, that experimentation entails boldness, and that to be bold people must not be afraid to fail.

Organisational principles

General organisational principles of the "sponge" organisation stress its broader purpose as a firm. This includes promoting beauty and happiness and leaving a distinctive mark. The most important principles that guide the way people in the organisation relate to each other are: a critical attitude, team work and holarchy, basing power on merits instead of hierarchical considerations.

In order to advance towards the "sponge" organisation, endowed with a harmonious pattern of internal and external relations, we need to put these values and principles into practice and behave consistently. Since practical implementation will depend on the specific organisational context, we will not present the proposals made by the project participants for specifying management, people, structure and systems of the "sponge" organisation. Some of the proposed actions are already practiced by innovative firms, while others may be regarded as propositions for enhancing sustainable innovation. The appendix summarises the most interesting contributions of our creative research project. In any case, the values just mentioned are the cornerstone of the "sponge" organisation.

Discussion

The use of metaphors can help to generate insights about the nature of organisations and how they can be designed and managed (Morgan, 1997). The view of the firm as a living system is in line with the emerging paradigms of the sustainable and responsible enterprise (see, for example, De Geus, 1997). But the organic metaphor of the sponge also emphasises the importance of openness towards the environment in which organisations exist. Openness plays a fundamental role in business innovation. It is

⁴ Holarchy is a word coined by Arthur Koestler and is a combination of the Greek word "holos", meaning whole, and the word "hierarchy". It is a hierarchically organised structure of units or entities known as "holons". A biological example of a holarchy would be an organism and its parts (organs, tissues, cells and molecules).

increasingly evident that companies' traditional boundaries have become more permeable, allowing information and knowledge to move easily between firms and their surrounding environment. In this sense, Chesbrough (2003) introduced the concept of "open innovation" as an innovation strategy that relies on a continuous supply of ideas and technologies from outside the organisation. An organisation that is too internally focused (with a closed innovation approach) is likely to miss opportunities that fall outside its current business focus or whose full potential can only be realised if they are combined with external knowledge and expertise. By embracing open innovation, organisations reach out beyond their own boundaries to benefit from the ideas, expertise and skills of potential partners (Sawhney and Prandelli, 2000). Thus, the openness of the "sponge" company strengthens the knowledge base that any company needs in order to discover and deliver novel ways of creating value and so renew itself.

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The values and principles of the proposed "sponge" enterprise model, apart from openness, can be related to four topics discussed in the innovation and sustainable development literature: diversity, collaboration, flexibility and ethics. The principles we identified -"to look for difference and singularity" and "to be inclusive, to look for and to appreciate diversity"- highlight diversity as an important factor for creativity and innovation. The term "diversity" encompasses a range of differences in ethnicity/nationality, gender, function, ability, language, religion, lifestyle or tenure (Bassett-Jones, 2005). In spite of the risks of interpersonal tension and conflict, it is generally acknowledged that the combination of diverse demographic backgrounds helps to question existing assumptions and think "out of the box" (see, for example, Cox and Blake, 1991; Iles and Hayers, 1997). As innovation most often happens when previously unconnected bodies of knowledge are connected, collaboration is also a key source of innovation. Several of our principles refer to collaboration in a broad sense: "to be one with the environment", "to engage in dialogue with an open mind", "to have a cooperative attitude" and "to work in a team". In the innovation literature, collaboration between business functions (Liedtka, 1996) and between different organizations (von Stamm, 2004) is discussed as a way to look for complementary knowledge sources. In particular, engaging in close contact and information exchange with external stakeholders, such as customers, suppliers, competitors and other parties, enables firms to obtain information and knowledge relating to relevant opportunities and to establish the positive relationships that are essential to fulfilling such opportunities. Much research has been conducted on the use of alliances, joint ventures and networks by firms to acquire new knowledge for innovation processes (see, for example, Rosenfeld, 1996; Tether, 2002). Interaction with stakeholders within and across organisational boundaries requires important adjustments in the way companies function; therefore, another prerequisite for innovation is flexibility. Some principles of the "sponge" company stress the flexible approach to innovation: "to promote creativity, trial and innovation", "to consider that unlearning and making mistakes are part of the learning process" and "to have an attitude of permanent questioning". Flexibility facilitates the development and implementation of new ideas (Georgsdottir and Getz, 2004). The impact of organisational flexibility on innovation has been studied with respect to operational activities, structure and strategy (Verdú-Jover et al., 2005). Finally, an issue rarely linked to innovation is ethics. Most of the principles we identified relate to ethical aspects of innovation: "to be transparent and authentic", "to take nature as a basic source of inspiration", "to consider innovation to be everybody's concern and to use it to improve the environment", "to promote holarchy, basing power on merits", "to have a healthy ambition, to try to leave a mark" and "to promote beauty and happiness". From an ethical point of view, it is not enough merely to facilitate the generation and implementation of innovative ideas; companies must ensure that the new ideas create value for the organisation, customers or humanity as a whole. In this sense, firms have a social role and an ethical obligation to improve people's living conditions (Gladwin et al., 1995). In addition, firms' ethical conduct will improve their internal cohesion and help to build confidence in their relations with internal and external stakeholders (Rodríguez et al., 2002).

In accordance with the values and principles of the "sponge" enterprise, we proposed aligned management, persons, structure and systems. There is an extensive literature about the influence that these organisational elements exert on companies' innovation performance. For example, there is a significant body of research analyzing the impact of the characteristics of top management teams on innovation (e.g., Bantel and Jackson, 1989; Camelo-Ordaz et al., 2005; Daellenbach and McCarthy, 1999). To a lesser degree, employees' attributes are examined in the form of relevant skills (e.g., Freel, 2005; Leiponen, 2005). With regard to the infrastructures needed by innovating firms, empirical studies are available on the effect of organisational structure (e.g., Ashkenas, 1998; Özsomer et al., 1997), as well as on different management systems, such as human resource management practices (e.g., De Leede and Looise, 2005; Searle and Ball, 2003; Shipton et al., 2005). Ultimately, management, people, structure and systems can be considered elements of an organisational competence or capability to innovate (Lawson and Samson, 2001). In this context, the literature has proposed a construct that fits perfectly with the image of the "sponge" organisation: absorptive capacity. Introduced by Cohen and Levinthal (1990), absorptive capacity refers to an organisation's ability to effectively acquire and utilise new internal and external sources of knowledge. It therefore plays a key role for the innovating firm.

Conclusions

Given the scant experience of companies linking stakeholder dialogue and sustainable innovation, we decided to adopt an original and innovative research method based on creativity techniques. The focus of our research was formulated initially as being "to generate creative ideas on how businesses can integrate stakeholder insights into the process of organisational innovation". This relatively open research question was narrowed during the project to the more specific objective of finding a definition, a list of values and principles, and important "hard" and "soft" attributes of the ideal enterprise, that is, one that uses its relationship with the environment as an essential innovation factor. The model resulting from this research experiment is built on the ideas (stimulated intuitively but also derived from experience) of a group of executives belonging to outstanding companies in the field of innovation and corporate sustainability.

The characteristics that our research attributes to the innovative and sustainable company are supported by existing management literature. Some of the proposed actions regarding management, people, structure and systems are already practiced by innovative firms, while others may be regarded as propositions that will enhance sustainable innovation. However, whereas in the literature innovation is generally discussed with an instrumental approach, the model of the "sponge" company also brings in a normative standpoint. There are many studies evidencing that organisational behaviour based on diversity, collaboration and flexibility improves innovation results and may have a positive impact on companies' competitiveness. Yet, until now, the fact that firms should focus on understanding and responding to the needs and desires of people inside and outside their boundaries has been given less attention. The proposed model of the "sponge" company suggests that innovation should include ethical considerations in order to promote the well-being of all stakeholders.

However, as Morgan (1986) warns, while any theory or perspective that we bring to the study of organisation and management is capable of creating valuable insights, it is also incomplete, biased, and potentially misleading. In this sense we would like to clarify that the "sponge" organisation is *one* model, not *the* model for the innovative and

sustainable firm. The creative process that we used to develop the model enabled the participants to overcome constraints and inhibitions that tend to limit the range of people's thinking. However, other processes and, surely, other people would undoubtedly generate other proposals. These other proposals would probably agree on most of the values and principles we put forward, but would likely propose different organisational elements to implement the vision of an innovative and sustainable enterprise. Finally, just as important as stressing that the model is just one of many possible models is emphasizing that it aims at an ideal horizon. Thus, the model cannot be viewed as prescriptive; rather, it must be adapted to each company's specific features and circumstances. Ultimately, there is no magic formula or "best" way to achieve sustainable innovation. The most important thing is to avoid inconsistency between the values upheld by management and the actions carried out within the organisation.

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Appendix

Putting into practice the values and principles of the "sponge" organisation

Management

Management is fundamental for implementing the values of the "sponge" organisation. Diversity of the management team is desirable, as it ensures different perspectives and skills for leading the company. Managers should make an attempt to "have one foot inside and one outside the company". That means creating a dialogue that cuts across all the usual organisational boundaries. In order to favour creativity, executives should try every now and then to escape from business routine in order to think and develop new ideas. Another attribute of managers should be the ability to convey enthusiasm in order to commit and motivate all the people in the organization. Finally, managers should be models of putting values into practice and give tangible examples in their day-to-day lives.

People

Organisations achieve their objectives through people – individuals and groups. Therefore, the "sponge" organisation should favour and promote certain specific attributes among its members. First, people should be diverse with regard to gender, culture, age, etc., as diversity always stimulates creativity and innovation. Second, the company should allow its members to behave as complete, level-headed people, capable of making balanced decisions. If people have a rich personal life and varied interests (e.g. art, volunteer work), this will intensify the company's interaction with society and broaden its outlook. Third, the innovative business should be based on team work and should encourage people to be sociable, collaborative and supportive of each other's ideas. Finally, the sustainable enterprise needs responsible people – both in their roles as citizens and as corporate members. Upright people should not be confronted with the "schizophrenia" of having to adopt different values at work and in personal life.

Structures

The organisational structure of the "sponge" organisation should take different, apparently contradictory forms. Hierarchy is necessary, but the organizational pyramid should contain as few levels as possible, so as to favour direct communication. It should also have a blunt apex to facilitate participatory and collective direction-setting. Parallel to the hierarchical structure, there should be temporary, flexible structures specifically tasked with promoting innovation in a broad sense. At the same time, informal networks should be created to support spontaneous innovation initiatives. For example, formal and informal structures could coexist in an "Innovation Committee", with rotating membership from different divisions and levels and with the mission to support potentially successful ideas from all employees. Finally, dialogue platforms should be initiated to systematise the company's relations with external stakeholder groups.

Systems

Both formal and informal systems should be consistent with the "sponge" organisation's values and principles. Selection systems should take the personal characteristics described above into account and assess people's personality, not just their workplace-specific skills. Also, career development should seek personal growth as much as

promotion within the hierarchy. Appraisal and remuneration systems should be linked to performance and the generation of innovative ideas. Training and education systems should provide relevant knowledge to the organisation's members, but also educate people to have a positive attitude towards dialogue and change. In order to bring about a shift in people's mental models, creative training methods should be used and experiential learning should be facilitated by means of job rotation, interchanges with key stakeholders such as suppliers and customers, enriching personal experiences such as international stages, leaves, etc. Organisational systems that promote innovation should stimulate experimentation and encourage risk-taking, without punishing failure. Possible examples are an "ideas laboratory", as a specially designed space in which to think and work creatively, or a "failures forum" for analysing failures in the company and learning from them. Communication systems should eliminate bureaucracy as far as possible and favour proximity between people. Communication with internal and external groups creates opportunities for cross-fertilisation of ideas, and therefore creative communication channels should be initiated. Examples include team working across corporate divisions, task forces with usually neglected stakeholders, external rewarded suggestions box, etc. Alliances are a common way for companies to acquire the necessary knowledge for innovation. But instead of focusing on traditional knowledgegenerating partners (other firms, universities, R&D institutions, governments), leading to convergent thinking, companies should consider provocative alliances with "non-traditional" stakeholders, leading to divergent thinking and generating new insights not considered previously.