BUSINESS SUSTAINABILITY

Is the Learning Organization one Step Ahead?
- A Research Report -

Authors:
Dan Oncică-Sanislav
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The 9th book in the Series of research publications

THE SUSTAINABLE ENTERPRISE

of the Center of Eco-Management at the Technical University of Cluj-Napoca

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Is the Learning Organization one Step Ahead?
– A Research Report –

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The series of publications „The Sustainable Enterprise” is a means of disseminating research findings and promoting new ideas, even in the phase of scientific speculation.
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<td>CSV</td>
<td>Creating Shared Value</td>
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<tr>
<td>FLA</td>
<td>Fair Labor Association</td>
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<td>OTE</td>
<td>Hellenic Telecommunications Organization</td>
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<td>GDP</td>
<td>Gross Domestic Product</td>
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<td>PR</td>
<td>Public relations</td>
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<td>CSR</td>
<td>Corporate Social Responsibility</td>
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<td>WBCSD</td>
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PREFACE

This book synthesizes the results of a research project carried out at the Center of Eco-Management (CEM) of the Technical University of Cluj-Napoca, Romania. It is one result of research launched at CEM during the second half of the 1990s and performed, to a great extent, with the help of PhD students.

The beginnings are related to working on environmental projects undertaken at company level, with a focus on researching the organizational implications of adopting and implementing environmental management systems.

Preoccupations extended then to the topic of the sustainable development of society which led, in our group at CEM, to clarifying the relationship between the activity of the business sector and sustainable development: companies are generators of social and environmental impact, while possessing both the resources and the key factors that allow them to reduce that impact, up to the point of eliminating it, and to contribute to developing a better society and maintaining a cleaner environment.

PricewaterhouseCoopers (2003, p. 14) stated: “Companies live or die by their relationships with those around them”, which means that in order to survive companies have to be considerate of others. At the same time: “The long-term viability of the corporation depends upon its responsibility to the society of which it is a part. And the well-being of society depends upon profitable and responsible business enterprises”, to quote an article in the Washington Post (Yang, 2013). These quotes equally reflect our group’s conviction that business and society should partner so that the efforts for sustainable development have a chance to succeed.

The doctoral research projects at CEM have been in the field of managing organizations, with a focus on the management of for-profit organizations and their actions oriented toward the sustainable development of society. We interpret the concept of sustainable development as the ideal of a human society thriving indefinitely. This concept relates at the microeconomic level to the "sustainable business", which is a company that succeeds in the long term. Since a company's success depends on the well-being of the society in which it operates, the contribution of companies to society’s sustainable development appears to be less an act of charity than of self-interest.
The topic of corporate social responsibility (CSR) emerged naturally in our group discussions on sustainable business, since voluntary activities of companies meant to solve social and/or environmental issues are their way of promoting the sustainable development of society and, implicitly, of building their own sustainability. In this vision we examined those CSR initiatives that are inextricably intertwined with business strategy since they are themselves sustainable as opposed to CSR actions done as a public relations exercise. The former are strategic CSR activities.

We hold the view that a company is sustainable if it stays successful for a very long time, with no end in sight. Obviously, that does not lend itself to assessing how sustainable a business has become; neither does it allow sustainability comparisons between companies. We call this the end state-based view, which reflects staying power. It is the ideal of sustainability.

An alternate view of business sustainability is based on the widespread belief that a company “that delivers value to investors, customers, and employees; improves the living standards of its employees and the communities it touches; makes wise use of natural resources; and treats people fairly” (Cramer and Karabell, 2010) has better prospects for long lasting prosperity, i.e., sustainability. We call this the process-based view. A variety of tools for the assessment of business sustainability and ratings, as well as for reporting on sustainability initiatives, have been devised based on measuring the intensity and steadiness of the processes believed to serve the progress towards the ideal. The process-based view is a workable concept; therefore we adopted it in our research.

About ten years ago some questions arose in our group relative to the sustainability related processes: Why some companies show more interest in sustainability while others exhibit limited solicitude for social and environmental issues? What kind of organization would naturally and inextricably include societal concerns in its actions?

In 2007 we advanced the hypothesis that a learning organization holds a better promise for sustainability (Cândea, 2007a). We were arguing that the systems thinking and mental models disciplines directly raise self-awareness of the fact that the company is part of a wider system of interdependent and interacting stakeholders; the same disciplines lead the company to question the “traditional” strategic models limited to customers and the marketplace. We believe that developing self-awareness and the quest for new mental models promote and
support the drive towards sustainability. That hypothesis was the research focus of a doctoral dissertation (Oncică-Sanislav, 2013), which then became the basis of this book.

Our research uses the case study method; two cases were developed and analyzed: one on a Romanian telecommunications company, Romtelecom S.A., and the second on Nike, Inc. Both cases cover time periods starting in the 1990s and ending in 2011, respectively 2012.

We have considered extending the initial time coverage of the cases closer to the date of publication of this book. However, the analysis of the evolution of the two companies beyond the time spans of the cases, as will be seen later, revealed that little would have been added to the findings of our research. There were also methodological reasons for not increasing the time span of the cases.

Thus, Romtelecom S.A.’s path after 2011 marks a discontinuity. In that year the company enters a process of operational integration with another telecommunication firm, followed by a change of name and complete rebranding in September 2014. Our analysis shows that its evolution toward sustainability stagnates at the level of 2011, very likely because of the absorption of its resources by the major reorganization and rebranding project. Thus, the post 2011 period loses its relevance for our study.

At the same time, the fall of 2011, when the stock market priced in gold bottomed and stocks was outperforming gold again, it is believed (Weisenthal, 2013) to mark the end of the economic crisis. The ensuing period is one of transition to a new global economic landscape posing unanticipated challenges to sustainability initiatives.

Since, as explained above, it made sense to limit the analysis of Romtelecom S.A. to 2011, the turn in economic conditions provided a good reason to also not extend the case study analysis of Nike beyond 2012, for a balanced treatment of the two companies.

Another argument is that our research takes into account the relationship between two complex phenomena – business sustainability and the learning organization – as dynamic, fluid and continuously evolving phenomena. The time period when the doctoral research was performed (2007-2012) overlapped to a great extent with the intervals covered by the two case studies (the final parts).
This overlapping brought, on the one hand, the advantage of studying the phenomena in real time and obtaining contextual and in-depth data on the researched concepts and their possible interactions.

On the other hand, revisiting the case studies for the writing of this book, after the analyzed period had passed, allowed the development of a more detached perspective of that period, beneficial for the validity, relevance and degree of generality of our study.

As a consequence, the data that came out subsequent to the time span of the case studies was used not so much for extending the analysis as for improving the understanding of the studied phenomena and for reinforcing the degree of validity of the data already used in the study. Nevertheless, we included in each case study a section called “Evolutions after the analyzed time period” which briefly presents the evolution of the companies after 2011 and 2012, respectively.
1. SUSTAINABILITY ISSUES. OUR HYPOTHESIS

1.1. Introduction

The global economic crisis, triggered by the financial crisis in the United States in 2007-2008, has demonstrated that short-term orientation of political and business leaders can have detrimental effects (Oncică-Sanislav and Cândea, 2009a).

The uncertain economic prospects brought the topic of business sustainability to the attention of organizations, their leaders increasingly perceiving sustainability as a necessity for the next development stage.

Already in 2002, Mieko Nishimizu, the World Bank Vice President for the South Asia Region, was stating: „That future appears alien to us. It differs from the past, most notably in that the Earth itself is the relevant unit with which to frame and measure that future. Discriminating issues that shape the future are all fundamentally global.” (Nishimizu, 2002, p. 3).

Monitoring these trends is essential for business survival. Werbach (2009) considers survival as a main argument for implementing a comprehensive strategy for sustainability: the company will survive and prosper only by identifying and following the trends emerging from the social, technological and natural resources fields.

Following and identifying the emerging forces and trends is vital for business success, as Davis and Stephenson (2006) point out. It is essential to be cognizant of and pay full attention to them when making strategic decisions because companies can react or, even better, can anticipate their impacts in order to derive benefits. Bisson, Stephenson and Viguerie (2010, p. 2) identified five major forces that will bear upon the business environment and, thus, will open promising opportunities for innovation and change; two of the forces are directly related to the natural resources and to the stability in social systems.

Lubin and Esty (2010), too, believe that the orientation toward business sustainability will join the list of megatrends, such as business globalization and large-scale implementation of the advancements in information technology, which will impose new strategic mandates on business leaders (Cândea, 2010).
Indeed, a 2010 survey by McKinsey reveals that over 50% of the respondents believe that sustainability is “very” or “extremely” important (McKinsey, 2010), and a study performed by MIT Sloan Management Review together with Business Consulting Group reveals that in over 70% of the companies the topic of sustainability is present on the current agenda of managers (Haanes et al., 2012).

Addressing sustainability strategically had been and still is a challenge for most companies. A survey published by KPMG in 2011, which included 378 top managers coming from a wide range of industries and representing, in equal numbers, geographic areas, such as North America, Asia-Pacific and Europe, shows that, despite the progress made, over a third of their organizations have no strategy for sustainability at all. Furthermore, from those who claim to have such a strategy, only one in three report publicly on the progress (KPMG, 2011).

There are numerous studies of the medium and long-term relationship between economic, and social and environmental performance. For instance, Wirtenberg, Russell and Lipsky (2008) cite the paper published by Cusack (2005), while Salzmann, Ionescu-Somers and Steger (2005) make reference to authors such as Pava and Krausz (1996), and Preston and O’Bannon (1997), who reveal positive correlations between social and financial performance.

Julie Fox Gorte refers to a Mercer study from October 2010 which includes the results published in 20 academic articles and 10 financial analyses issued by brokerage houses, concluding that approximately 50% of the results indicate a positive correlation between economic, and social and environmental performance, while only 15% showed a negative correlation (Gorte, 2011).

However, Cândea (2010) points out that there is no consensus with respect to the favorable effect of a good social and environmental behavior. The author cites a study by Lobe et al., (2009), who compared the financial performance of a set of company stocks from industries deemed unethical with that of companies in the most important international indexes of "virtuous" investments, without finding any significant differences between the two groups.

Wirtenberg, Russell and Lipsky (2008) find, on the contrary, that there is increasing evidence that the social and environmental performance of companies is strongly associated with their financial and market performance.

Given the emergence of sustainability as a megatrend and the increasing evidence that a socially responsible business conduct benefits the business, we will
adopt in this book the position expressed by Porter and Kramer (2006, 2011); they advocate that integrating solicitude for society and environment tightly with business strategy is essential for the long-term survival of a company. Porter and Kramer opine that the purpose of a business needs to be redefined as “shared value” creation, which is the creation of business value by identifying and addressing social problems in the communities in which the business operates.

We will examine the conceptual aspects of business sustainability in what follows.

1.2. Business sustainability: a short conceptual analysis

The concept of business sustainability is not amenable to simple or universal definitions. Wilson (2003) notes that sustainability is a relatively new and, above all, evolving concept. It is a fluid concept that changes over time in response to the upward trend in accumulating existing information and because of the progressing priorities of society (IISD, 1992; Holliday, Schimdheiney and Watts, 2002; Boström, 2012).


Each of the five concepts is briefly defined and analyzed in what follows. The connection between each of them, and business sustainability, as it is treated in the literature, is equally considered.

1. Sustainable development was defined by the Brundtland Report (Brundtland, 1987, p. 43) as being the „development that meets the needs of the present without compromising the ability of future generations to meet their own needs”, a development described as a “process of change in which the exploitation of resources, the direction of investments, the orientation of technological development, and institutional change are all in harmony and enhance both current and future potential to meet human needs and aspirations”. The report acknowledges the foremost role of companies, in particular, and of the business world, in general, in economic development, but underlines the fact that they need to
become proactive in balancing economic objectives against the social equity and environmental protection agenda. This is because, on the one hand, companies play a significant role in generating the current social and environmental problems, and on the other hand, they possess the resources needed for solving the issues that challenge society.

The concept of sustainable development reveals the major issues company strategies should pursue in order to target sustainability: economic performance, environmental protection and concern for the social impact. Sustainable development is a social desideratum for whose achievement companies, governments and civil society must cooperate.

Werbach (2009) observes that sustainability, as a concept related to the corporate environmental and societal responsibility, has emerged after the 1987 Brundtland Report.

As a matter of fact, many definitions of business sustainability were derived from the Brundtland definition of sustainable development. To illustrate we present a definition suggested by the International Institute for Sustainable Development (IISD) in 1992: "For the business enterprise, sustainable development means adopting business strategies and activities that meet the needs of the enterprise and its stakeholders today while protecting, sustaining and enhancing the human and natural resources that will be needed in the future." (IISD, 1992, p. 2)

2. **Environmental management** is a system for protecting the environment integrated with all managerial functions in order to achieve economic and environmental performance. The contribution environmental management can make to building business sustainability is to identify the key corporate environmental issues to be tied into business strategy.

Cândea and Mireșan (2006, p. 243) identify in literature three major ways of how organizations deal with environmental protection. A first approach is to formulate and implement top-down environmental strategies in the organization, the second focuses on introducing comprehensive environmental management structures and systems, while the third brings increased attention to the changes that the organizational culture needs in order to support the achievement of good environmental performance.

3. Another way of addressing business sustainability is by means of the
stakeholder approach. R.E. Freeman suggests revisiting the classic owner-manager-employees triad by acknowledging the existence of other stakeholders of the organization (Freeman, 1984), defined as the groups or individuals who are affected in one way or another by the organization’s activities and who can, in their turn, affect the achievement of its objectives. The relationships based on trust, respect and cooperation with these stakeholders support the achievement of the long-term business objectives. This approach provides a framework for the measures a company can take if it wants to become sustainable, after having identified its relevant stakeholders.

Stakeholders seek various, often divergent goals (Donaldson and Preston, 1995), which makes a challenge out of developing strategies able to meet their expectations. For instance, shareholders and other investors wish a high return on the invested capital, employees want secure jobs and competitive salaries, customers look for high quality goods and services at affordable prices, regulatory authorities ask for compliance with regulations, the local community is after investments in the social context, etc.

4. The concept of social responsibility, proposed by H. Bowen as early as 1953, makes a contribution to the implementation of the steps required to build the sustainable enterprise. Bowman defines social responsibility as represented by “the obligations of businessmen to pursue those policies, to make those decisions, or to follow those lines of action which are desirable in terms of the objectives and values of our society” (Bowen, 1953). The debate around this point of view spans between two extremes: one which affirms that the only social responsibility of a business is to increase its profits (Friedman, 1970), and the other one which states that companies are responsible to society because they are an integral part of it and function by the public consent embodied in a license to operate (Van Marrewijk, 2002). CSR comes under a variety of approaches ranging from voluntary ethics-based actions and going all the way to anticipating laws that will be enacted in the future and complying early on. It is considered that a company has four types of social responsibilities: economic, legal, ethical and philanthropic (Carroll, 1991). The economic responsibilities refer to the obligation toward stakeholders and society to generate profits and economic growth. Legal responsibilities constrain the company to carry out economic activities in compliance with regulations and laws. Ethical
responsibilities regard the obligation to run the business in a way that respects human rights in all relations between the company and its employees, customers and local community, etc. Philanthropic responsibilities concern voluntary actions intended to help and develop the community.

CSR enriches the content of the business sustainability concept by providing the ethical arguments to be included in sustainability strategies.

5. Corporate accountability originally refers to the management-shareholders relationship. This is based on the agency theory and the law of agency, where the shareholder is the "principal", and company management is the "agent". The relationship thus formed can be regarded as an agreement whereby the stakeholder ("principal") entrusts his/her capital to the firm management ("agent") and the latter is responsible for using it in the best interest of the stakeholder. The "agent" is held responsible by the "principal" for the way in which the capital is used and for the achieved profitability.

The theory of corporate accountability states that corporate accountability should not be confined to the traditional fiduciary model, rather extended to other stakeholders as well. The argument is that companies enter into (implicit or explicit) agreements with many stakeholder groups, by way of their current activity. These agreements can be regarded as a basis for establishing a corporate accountability type of relationship.

Because the literature on the business-society duo presents differing points of view on the relationship between the concepts of business sustainability and CSR, at this point we deem it necessary to discuss this relationship and clarify the position we adopt in our book.

Dentchev (2005) addresses the concept of “business sustainability” as related to but different from the concepts and topics covered in studies on the social responsibility of business, concepts such as CSR, corporate social performance (CSP), stakeholder theory and corporate citizenship, and analyzes the similarities and dissimilarities between business sustainability and its social responsibility. With respect to similarities, the author points out that, although business sustainability distinguishes itself through strategic orientation, it prescribes, similarly to exercising business social responsibilities, “business solutions for matters reaching beyond companies” and that “… similarities of corporate sustainability to CSP (and thus
respectively to stakeholder management and to corporate citizenship) are the level of analysis and the challenge to the exclusive, ego-centered economic bottom line”. As for dissimilarities, they reside in the strong association of business sustainability with environmental issues (while CSP looks mainly at social issues) and in the fact that the existing literature on business sustainability is prevailing strategy-oriented, demonstrating that „corporate performance with a concern for people and the natural environment is consistent with building and sustaining competitive advantage.” (ibid. p. 32). Van Marrewijk (2002), too, underlines the similar meanings of business sustainability and CSR. Van Marrewijk states: "In general, corporate sustainability - and, unfortunately, also the contemporary understanding of CSR - refers to company activities, voluntary by definition, demonstrating the inclusion of social and environmental concerns in business operations and in interactions with stakeholders. This is the broad - some would say ‘vague’ – definition of corporate sustainability.”

Similarly, Montiel (2008), cited by Vaida (2010), found by a comparative analysis that in terms of the managerial approach business sustainability and CSR are regarded as covering the same issues: the simultaneous addressing of the social, environmental and economic problems. In other words, both concepts refer to the performance of companies in terms of the three dimensions of sustainable development.

The opinion that the two concepts are equivalent is not universally shared, though. Some authors, for instance, Porter and Kramer (2006, 2011), consider that the sustainability-oriented actions of a business are only a part of its CSR because business sustainability is associated with the narrower concern for the natural environment only.

For the purpose of this book, the two concepts, business sustainability and strategic CSR\(^1\), will be considered synonyms and will be used interchangeably given, on the one hand, the identical way in which they relate to society’s sustainable development and to business long-term success and, on the other hand, the similar features they share and the minor differences between them, as identified by Van Marrewijk (2002), Dentchev (2005) and Montiel (2008).

\(^1\) „Strategic CSR” was defined by Porter and Kramer (2006); it can create shared value.
1.3. Business sustainability as an end state and as a process

The concept of sustainable development upholds the compatibility and complementarity of its three dimensions: economic, social and environmental. It is a global, macroeconomic concept, particularly through its social and environmental facets (Cândea, 2006). The Brundtland Report states that: "Sustainable development is not a fixed state of harmony, but rather a process of change in which the exploitation of resources, the direction of investments, the orientation of technological development, and institutional change are made consistent with future as well as present needs". Seen in these terms, sustainable development can be regarded as a global aspiration (IFAC, 2011).

In its current meaning, business sustainability is a term that only makes sense in association with sustainable development (Cândea, 2007), since it originates from that concept (IFAC, 2011). Therefore, it must be addressed in relation to but as a different notion than sustainable development; it can be regarded as the correspondent of sustainable development for the business sector.

In this context, the sustainable business can be defined as a business capable to thrive, to be successful in the long term, pursuing a well-defined, energizing, compelling direction in business, combined with positive environmental and community related purposes (Cândea, 2006, p. v). Companies that will manage to build proactive strategies treating stakeholders as an indissoluble part of the corporate strategy will be able to distance themselves from competitors, thereby increasing their prospects for sustainability (Oncică and Cândea, 2009b).

Business prosperity can be measured in many ways. We hold that from a strategic perspective a company’s ultimate purpose is to serve its customers in a way different from competition and thus create value for its shareholders. In this light, a sustainable business is a business able to provide its shareholders, for an indefinitely long time, with a fair return on the invested capital (Cândea, 2007a). Hence, a sustainable business is a business thriving in the long term, with no foreseeable time limit. Being a sustainable business means "thriving in perpetuity" (Werbach, 2009, p. 9).

From this definition, which views sustainability as a desired end state (Cândea, 2010, p. ii), it follows that, similarly to sustainable development, there is no reference point in time that, once reached, would mark the achievement of the
sustainability status by the company. This is because it is impossible to claim at any point in time that a company has become sustainable, i.e., permanently thriving (Ehrenfeld, 2000); this is also true for society. Cândea (2010) explains: "Sustainable development, at the society level, and business sustainability are targets distant in time that a company should be pursuing ceaselessly, without actually being able to achieve them, the way objectives of a plan are. Sustainable development is a journey, a way of life and, similarly, business sustainability is a becoming”.

Sustainability is, therefore, not a target to achieve, but rather a continuous process of change, essentially a process of learning (Senge, Carstedt and Porter, 2001). The sustainability of a social system is a measure of its learning ability in relation to its environment (Allen et al., 2002 apud Smith, 2003).

Sustainability can be viewed as a strategic learning process, whose behavioral result is what the company does to become and stay sustainable. By the actions companies undertake for sustainability they seek to improve their prospects for maintaining prosperity indefinitely (Cândea, 2010). Hence, business sustainability seen as a process refers both to the actions the organization carries out in order to transform itself through learning and to what it does to contribute to the sustainability of the social and natural environments in which it operates.

As pointed out above (section 1.1) addressing sustainability strategically has always been a challenge for most companies (KPMG, 2011).

We will examine in what follows several relevant models published in the literature about the possible evolutionary steps companies go through on their way toward integrating organically sustainability desiderata into their strategy. “There's a learning curve to incorporating sustainability into strategy," says Knut Haanes, one of the coauthors of the research report "Sustainability nears a tipping point" (Haanes et al., 2012), published by MIT Sloan Management Review jointly with Boston Consulting Group in the winter of 2012. “Our research suggests a pattern: First a company focuses on reducing costs, boosting efficiency, and enhancing its corporate reputation. Then, after a while, it takes a broader view, becoming innovative with products and processes, and gaining access to new markets" (BCG, 2012).
1.4. Analyzing the multistage approach followed by organizations in addressing sustainability

In order to provide companies with a systematic reference point that would help them identify the stage at which they or their divisions are on the way to integrating sustainability principles into their strategies and values, many "sustainability continuums" have been developed (Willard, 2005). Those are models that summarize the defining features of an organization in the different stages on the path to integration. The models are meant to not only help companies assess their current position, but to also help them establish future lines of action in order to move as effectively as possible to the next stage (Dunphy and Benveniste, 2000).

1.4.1. Modeling the stages of sustainability continuums

We consider a first example of such a continuum, developed by Dunphy and Benveniste (2000). The model consists of six phases through which organizations progress, the characteristics of each phase being detailed by the authors. We present briefly the phases of the continuum.

– **Phase 1: Rejection.** The social and environmental duties of sustainability are disavowed. Sustainability is considered unimportant, possibly detrimental to the business. The organization actively lobbies and fights against regulations in the field.

– **Phase 2: Non-Responsiveness.** Lack of response to sustainability problems; incapacity to react. Sustainability-related issues are considered irrelevant, beyond the company’s sphere of interest.

– **Phase 3: Compliance/Risk Reduction.** The minimum actions are taken, only as much as necessary to comply with legislation and regulations, or to reduce possible risks to acceptable levels.

– **Phase 4: Efficiency.** Recognizing the potential for savings by waste reduction and for increasing efficiency through educating employees and improving working conditions and labor safety.

– **Phase 5: Strategic Sustainability.** Recognizing the potential of sustainability to generate competitive advantage. The organization takes actions to incorporate sustainability into its business strategy.

– **Phase 6: Ideological Commitment.** Sustainability is internalized and institutionalized. The organization combines the features of stages 3 – 5. It becomes a promoter of sustainability, taking steps to transform the competitive context in
which it operates, including initiatives for tightening regulations and modifying market structures. The organization is aware that all these will be beneficial to itself by enhancing its competitive advantage, and will also benefit society and the natural environment.

Dunphy and Benveniste indicate that business units of the same company may find themselves at different stages of the continuum. At the same time an organization may find itself at a certain stage relative to the social aspects of sustainability and at a different stage in relation to the environmental aspects. Organizations may show particular concerns for either social or environmental aspects, which may depend on their field of activity too.

Another author, Willard (2005), examines seven continuums of strategic sustainability advanced in the literature. Noting that the seven models are conceptually similar, although their authors use differing labels for the stages of the continuums and various languages for defining the features of each stage, Willard summarizes them in a model with five stages of development. In our view, an important contribution of this synthesis is the specification of the determinants (internal and external to the organization) that can lead to progress toward higher stages in the continuum. The model is illustrated in figure 1.4.1.1 below.

We describe briefly, in what follows, the five stages of the model and present a few details about the transition from one stage to the next and the determinants of those transitions.

- **Stage 1: Non-Compliance.** The company perceives no further obligation beyond generating profits. It ignores the idea of sustainability or, even more, actively battles regulations for sustainability.

- **Stage 2: Compliance.** The company strictly complies with legislation and all labor, health and safety regulations. It reactively but efficiently does what it is legally bound to do. Any potential philanthropic (social) or environmental protection initiatives are treated as costs. In case environmental protection projects are undertaken they use "end-of-pipe" solutions, while the social dimension of sustainability is treated superficially, as a means to improve public image.

- **Stage 3: Beyond Compliance.** The company moves from defensive to offensive. It realizes that it can minimize costs and improve its operational efficiency through eco-efficiency, cleaner processes and better waste management. It understands that investing in the community and social marketing can bring benefits.
by minimizing uncertainty, improving reputation and maximizing shareholder value. Sustainability initiatives are nevertheless considered a necessary evil and are marginalized in the company's core departments.

– **Stage 4: Integrated Strategy.** The company goes through a radical change. It undergoes a reconstruction process, presenting itself as an organization committed to sustainability, integrating sustainability into its key business strategies. It manages to capture value added through innovative initiatives that benefit all relevant stakeholders. Instead of regarding sustainability in terms of costs and risks, the company sees it as an opportunity to invest and find new business opportunities. It enjoys competitive advantages due to its sustainability initiatives, by differentiation, from the first-mover advantage and reputation.

– **Stage 5: Purpose/Mission.** The company is driven toward sustainability by internal passion and a commitment based on sustainability values. It is dedicated to both its own well-being and the well-being of society and of the natural environment. The organization tries to contribute to building a better world by acting on true beliefs.

Figure 1.4.1.1. From compliance to innovation. Source: Willard (2005), apud Senge et al. (2008)
We consider useful to briefly describe the impact of the determinants, and the transitions from one stage to the next in order to clarify the internal transformations needed to reach stages 4-5 and to understand the obstacles companies face in their evolution toward sustainability.

Many organizations stall at the first two stages (Non-Compliance or Compliance). Getting stuck at those stages often brings external pressures – the effect of regulations, fines, threats from governments to withdraw operating licenses or pressures from civil society, media and non-profit organizations.

The reactive change, adopted under pressure, is generally extremely expensive. Having experienced such costs, many managers consider, by inference, that the leap from a reactive to a proactive attitude will cost even more, companies thus missing the potential benefits of adopting a proactive attitude. For companies at those two stages, remaining stuck there is determined, among other things, by circular processes, called reinforcing loops in systemic language and illustrated in figure 1.4.1.2 (developed by the authors of this book from Senge et al., 2008; Willard, 2005).

These reinforcing (amplifying) loops are vicious from the perspective of evolving toward sustainability because they amplify the factors that generate the opposition to/delay in implementing sustainability measures. A first landmark in the
evolution toward sustainability is therefore the transition from stage 2 to stage 3 (figure 1.4.1.1). Change gains momentum when the company manages to perceive the possible positive impact on efficiency, costs and reputation. As the company enters stage 3 (Beyond Compliance) it finds that cost reductions and benefits often exceed the initial investment (Senge et al., 2008). We can illustrate the phenomenon once again by a reinforcing loop, a virtuous one this time (figure 1.4.1.3):

![Figure 1.4.1.3. Virtuous cycle supporting the drive toward sustainability, stage 3](image)

Moving from stage 3 (Beyond Compliance) to stage 4 (Integrated Strategy) implies a real qualitative leap: it requires the ability to link market opportunities with corporate responsibilities. Good examples are: creating innovative products and services for the world's poor (Prahalad and Hammond, 2002), while eliminating negative impacts such as pollution, waste and child labor; creating social value such as sanitation, food security, access to clean water and new jobs; exploiting partnerships with various stakeholders as a source of products, services and innovative solutions; putting sustainability at work as an engine for growth and risk mitigation (Willard, 2005; Carpenter and White, 2004).

The transition from stage 3 to stage 4 is transformational; it is not a transition, like moving from stage 2 to stage 3. To illustrate we can consider the environmental
dimension of sustainability. Advancing to stage 3 requires continuous improvement in ecoefficiency, while progressing to stage 4 asks for innovative, discontinuous, "creative destruction" leaps (Willard, 2005, p. 29) in existing industrial processes and product design, and innovations in incorporating sustainability values in products, services, markets and processes. Willard asserts: "Transformations are not trivial. Moving from stage 3 to stage 4 requires internalizing sustainability notions in profound ways, both personally and organizationally. [...] Sustainability-based thinking, perspectives and behaviour are integrated into everyday operating procedures and the culture of the organization." (ibid.).

As an external manifestation, stage 4 and 5 companies are very similar. What differs is motivation. "Stage 4 companies 'do the right things' so that they are successful businesses. Stage 5 companies are successful businesses so that they can continue to 'do the right things'" (ibid.).

If we compare the two models presented so far the conclusion is that they are quite equivalent. We can consider phases 1 and 2 of the Dunphy and Benveniste model (2000) (D&B) included in stage 1 of the Willard model (2005) (W). Phases 3 and 4 (D&B) are similar, almost identical, to phases 2 and 3 (W) respectively. Comparing stages 5 and 6 (D&B) with 4 and 5 (W) respectively reveals certain differences in characteristics, although overall in both models the last two phases consist of the same attributes just distributed differently between the phases. In our opinion the continuum proposed by Willard (2005) incorporates the Dunphy and Benveniste (2000) model.

We believe society needs sustainable businesses for its sustainable development (Cândea, 2010). But no enterprise, however large, can assume such a mission by itself as it can only have a limited impact on sustainable development. However, as more and more organizations invest in regenerating social and environmental solutions and develop the ability to develop such solutions, the resulting synergies may lead to “tipping points”2 (Gladwell, 2000) that could bring into existence economically, socially and environmentally regenerative entire industries and even economies (Senge et al., 2008).

Along similar lines Elkington (2001, 2004) considers that, should a sustainable global economy emerge, it will be the result of certain economic, social, political and

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2 "Tipping point" is defined by Gladwell as “…that magic moment when an idea, trend, or social behavior crosses a threshold, tips, and spreads like wildfire.”
technological metamorphoses. The author believes that the current models of wealth creation are not sustainable, today's economy being highly destructive of social and natural capital, and marked by a widening gap between the rich and the poor of the world. Consequently, pressures on governments and corporations for a transition toward sustainable development are growing continuously (Elkington, 2004, p. 10).

Elkington suggests a model consisting of four possible types of corporations having sustainability in view. The model looks not only at the internal organizational attributes (the way the models presented so far have done) but also at the economic dimension and the potential impact those corporations can have on society and on its sustainable development. The model uses metaphors derived from the biological world to define the four types, and is presented in table 1.4.1.1.

Table 1.4.1.1. Corporate types in view of sustainability. Source: Elkington (2001, 2004)

<table>
<thead>
<tr>
<th>LOW IMPACT on society and sustainable development</th>
<th>HIGH IMPACT on society and sustainable development</th>
</tr>
</thead>
</table>
| **REGENERATING COMPANIES**
  generate increasing benefits for both themselves and society |
  *BUTTERFLIES* |
  *HONEYBEES* |
| **DEGENERATING COMPANIES**
  generate decreasing benefits for both themselves and society |
  *CATERPILLARS* |
  *LOCUSTS* |

We briefly describe the characteristics of each organization type:
- **LOCUSTS** have a potentially strong negative impact on society and on sustainable development, "devouring" the various types of capital. Corporate Locusts are widespread, destroying social and environmental capitals, undermining the foundations of future economic growth. They exploit the non-regenerating resources and overwhelm the carrying capacity of the natural, social and economic systems. They are incapable/unwilling to foresee the negative systemic effects of their actions. At the same time, they are not willing to heed the warnings of various stakeholders or to learn from mistakes. They strongly believe that the immediate interests of shareholders and management are best served by their degenerating activities.
Some organizations operate as "destructive locusts" throughout their entire life cycle; others adopt "Locust"-like behaviors only occasionally.

- **CATERPILLARS** have the potential to transform themselves but their activity is still based on unsustainable business models. They generate a rather local, limited impact. In most cases, they operate in industries where there are already companies that pioneer transformational efforts toward more sustainable models of value creation. It is the short-term benefits (cost reduction, public relations campaigns) that generate their interest in sustainability. They often claim to be more advanced in terms of sustainability than they really are, which hinders their evolution toward more advanced stages.

- **BUTTERFLIES** are companies that generate economic, social and environmental value. By their nature they are very visible, sometimes very vocal in promoting sustainability values, which they promote as an article of faith. Unfortunately, they are usually rather small, lacking a significant economic strength. Consequently, their impact remains local, somewhat limited. They are nevertheless very important for the transformation toward a sustainable economy, as they give shape to new forms of value creation models that can be taken over by the "honeybees". Last but not least, they can serve as sustainability behavioral examples to the latter.

- **HONEYBEES** are companies that have a sustainable business model that integrates ethical, social and environmental principles into their strategies. They nurture natural, social and human capital and develop close, even symbiotic, partnerships with various stakeholders. They learn, develop networks and industrial ecologic systems, and incubate new, innovative products and services. They are able to reduce the impact of "caterpillars" in their supply chain, to learn from the mistakes of "locusts" and, in certain circumstances, to support the efforts of "butterflies". Their impact is strong as they have great economic power. Their impact is not only sustainable, but also regenerating.

In principle, no organization is doomed to remain forever in the "Locust" or "Caterpillar" phase. By finding the appropriate stimuli and with leadership, any organization can start the transformation toward a sustainable business model. Because, as we have shown, sustainability is both a way of becoming and an objective, in order to become or remain sustainable organizations must move continuously through what Elkington calls the "learning flywheel" (figure 1.4.1.4).
A brief description of the five phases follows.

- **Invasion** – the natural process by which innovation, in the form of new technologies or new business models, invades a space of opportunities creating a different set of economic, social and environmental impacts. Invasion leads to sharing across an industry or economy results that the learning flywheel generates at the individual level of companies.

- At the second stage the emphasis is on **Internalization** – a phenomenon by which the company assumes and absorbs some of the costs previously externalized to society and environment.

- As responsibilities and opportunities perceived due to internalization build up, management needs to set its priorities. Consequently, the third stage focuses on the **Inclusion** process – the process by which the company identifies a wide range of internal and external stakeholders, engages them progressively, establishes their priorities, and adopts their legitimate needs.

- At the next stage, the fourth, the company has to respond to the challenge of **Integrating** the priorities previously determined into the corporate strategies and governance.

- A company, no matter how well run, cannot be sustainable unless the business model it follows and the technologies it uses are viable in the long run. Following the strategies built in the previous stage, the organization would have to focus on **Incubation**: innovating and promoting the development of new sustainable technologies and new business models that should meet the challenges and
opportunities identified in the competitive arena.

1.4.2. Conclusion. Synthesizing a model of the organizational learning process for sustainability

In summary, the Dunphy and Benveniste model is valuable because it provides details on organizational and behavioral characteristics of companies at the various stages on the road to sustainability. The Willard model (fig. 1.4.1.1) describes, too, those characteristics and adds value by detailing the factors that govern the transition from one stage to the next and by emphasizing the specific differences between the stages. As previously shown, we view the Willard model as including the Dunphy, Benveniste model.

The model proposed by Elkington (2001, 2004) integrates in its archetypes the impact the economic dimension of the organization has on the sustainability of its environment and details the underlying learning process of the evolution along the sustainability continuum – the learning flywheel (fig. 1.4.1.4). The learning flywheel concept emphasizes an element we deem essential for business sustainability: the learning process needs to be continuous for a business to maintain its course toward sustainability.

As a conclusion, we consider that the learning flywheel models the core learning process driving sustainability in each of the stages 2 – 5 of the Willard model. This process is fueled not only by the phenomena reported by Elkington in what he generically calls Invasion, but also by the determinants identified by Willard. At each stage the company will move through the learning flywheel once or several times in its sought after evolution to the next stage. The organizational level where learning is likely to take place will vary depending on the development stage reached by the organization. The learning process will occur particularly, but not exclusively, at the operational level at stages 2 and 3, then it will become increasingly incorporated into the strategic level, thereby generating and supporting the organization’s transition from stage 3 to stages 4 and 5.

At stages 4 and 5 the learning flywheel will be incorporated into the strategic processes of the company: the phases called Internalization, Inclusion and Integration are part of strategy development, while Incubation is characteristic of operationalizing the strategy.

The synthesized model is illustrated in figure 1.4.2.1. The way to
sustainability is essentially a learning process taking place over time. Companies that undergo this process evolve through the five stages of the model.

1.5. An analysis of the likely reasons why companies commit to sustainability differently

Both Elkington (2001, 2004) and Willard (2005) consider that, in order to achieve the desideratum of sustainable development, a very large number of organizations reaching stage 4 in the above model would be needed. Senge et al. (2008) also support this view.

In reality the majority of companies are at stages 2 – 3 along the continuum (Smith 2003; Senge et al., 2008). Despite some encouraging signs, due to a seemingly improved overall situation over the last decade (UNGC, 2010) and with some recent research (Haanes et al., 2012) even reporting that a “tipping point” (defined earlier) is being approached, most companies apparently stay unchanged. In the Preface to this book we raised the question: why some companies show more
interest in sustainability while others give limited consideration to social and environmental issues?

There could be several causes that lead to this situation:

– A first reason could be that not all entrepreneurs or investors and, therefore, not all companies share the ideal of sustainability (Elkington, 2004; Cândea, 2011). For example, they may be of the "Locust" type, as defined by Elkington or, as Cândea explains: "there are cases when a business is created in order to be sold after reaching a level of development that makes it attractive to acquisition, which should prove beneficial to those who started the business." (Cândea, in 2010, p. ii).

– The magnitude of the leap from stage 3 to stages 4 and 5 can be an obstacle in itself. This leap is considered significant (Senge et al., 2008), radical (Ehrenfeld, 2004) and transformational (Willard, 2005), requiring a radical transformation of the way in which organizations and their managers perceive value creation (Porter and Kramer, 2011).

– Last but not least, as we have seen from the models discussed earlier, the way companies address sustainability depends on their differing capabilities to understand the connection between a socially responsible behavior and company long-term prosperity, and the ability to incorporate stakeholders' concerns into corporate strategies and policies (Cândea, 2010).

We have to also mention other factors that can impede faster progress toward sustainability, which are the unclear terminology, the large number of definitions and their ambiguity, and the diverse number of frameworks and recommended ways of addressing sustainability. All those can create confusion and uncertainty, induce indecision in organizations as to the best path to follow, and require the nontrivial effort of adapting the various general recommendations to company specifics (Elkington, 1997; The Sigma Project, 2003; Smith, 2003; Senge et al., 2007; Senge et al., 2008).

It is true though that the proliferation of a large number of frameworks and approaches is considered constructive; the concept under consideration being extremely complex pluralism of views is preferable to a unilateral approach (Bostrom, 2012). The variety of models allows finding the right one for the organization, with the strategic guidelines, practices and organizational metrics having to be adapted to the people, culture, market, technology and history of each
organization (Senge, 2009). Adapting the way to approach sustainability to the specifics of each organization is a source of differentiation and can be used to generate and maintain the competitive advantage (Porter and Kramer, 2006; 2011).

In the next section we present a brief analysis of the frameworks and methodologies proposed in the literature for addressing sustainability from a strategic perspective.

1.6. A study of the approaches to company sustainability

1.6.1. A holistic perspective

By analogy with the three pillars of the sustainable development concept: economic development, social development and environmental protection, the generally held view is that companies should strike in all their actions a balance between their economic, social and environmental performance (Cândea, 2010). Indeed, most definitions of the business sustainability concept encompass the three components (Smith, 2003) with the combined performance being epitomized as the “triple bottom line”.

The “triple bottom line” (TBL) accounting framework was first defined by John Elkington in 1994, in an article published in California Management Review, titled Toward the Sustainable Corporation: Win-Win-Win Business Strategies for Sustainable Development.

The term, in its strictest sense, was initially proposed as a framework to measure and report business results on the basis of some performance indices of the economic, social and environmental impacts of business activities. Lately, the term has acquired a much broader sense. It currently captures an entire set of values, issues and processes that companies should address in order to minimize damages to society and the natural environment resulting from company activities, both value-creating and value-destroying (Sexty, 2010). According to Fărcaș (2007), for instance, the concept refers to the practice of measuring and reporting business performance beyond the financial perspective by considering an integrated vision of the organization, clearly identifying the economic, environmental and social impacts.

However, not all authors agree with the effectiveness of the concept in promoting an integrated vision of the organization and of the actions it has to undertake to address sustainability.
The Sigma project, for instance, considers the TBL concept very important and influential, but notes that it could promote the idea that the three sustainability dimensions could and should be treated separately (The Sigma Project, 2003). Even the promoter of the model states in a 2004 study that for companies in certain stages of development on route to sustainability the TBL language can encourage "parallel activities rather than true integration" (Elkington, 2004, p. 15).

The Sigma Project (2003) considers that a holistic approach to sustainability is required since the three dimensions are often strongly interrelated. For this purpose they offer a model useful for companies’ strategic effort to create a vision and to define principles forming the foundation of managing sustainability. This model, illustrated in figure 1.6.1.1 and called The **SIGMA guiding principles**, consists of two core behaviors:

1. The holistic management of five different types of capital that reflect an organization’s wealth (in the broadest sense of the word) and its overall impact.
2. Exercising corporate accountability, characterized by transparency, concern for stakeholders and compliance with relevant regulations and required standards.

![The SIGMA Guiding Principles](image_url)

**Figure 1.6.1.1. Guiding principles of sustainability. Source: The Sigma Project (2003)**
The five types of capital are: natural, social, human, manufactured and financial.

The natural capital is the one that determines all other types of capital, given that natural resources and ecological systems are essential for life, and both the organization and society depend on it.

The social, human and manufactured capital are considered components that are critical for the organization and its activities. High levels of these capitals generate value both for organizations and for society, including an improvement in the stakeholders’ quality of life. The financial capital is deemed to be crucial for the survival and continuous prosperity of the organization and derives from the value generated by the other four types of capital. The model points out that all five types of capital are heavily interlinked, even partially overlapping.

The entire system is circumscribed by the principle of corporate accountability, which reflects the relationship between the organization and its stakeholders and represents the means by which the organization demonstrates how it manages the five types of capital and promotes the transparency of their utilization.

More and more companies showing particular concern for sustainability assess the present and the future in light of the model of five types of capital (Costanza, 2001; Wirtenberg, Russell and Lipsky, 2008). The financial sector too takes the five capital types into account increasingly, begins to acknowledge their importance and considers including them in the GDP calculation (Wirtenberg, Russell Lipsky, 2008). It is however necessary to quantify what have been previously considered externalities such as the unintended consequences, positive and negative, of growth (the use of the natural resources and the impact of the economic activities on them), to tackle the issue of considering the social and ethical aspects of national well-being (so far considered independent), to take into account public health, etc.

The model of the five types of capital is founded on the dimensions of the triple bottom line model, the two models being complementary: the economic side of

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3 OECD (2003) defines externalities as referring to cases when the effect of producing or consuming goods and services creates costs or benefits to others which are not reflected in the prices of goods and services being provided. Pollution is an example of a negative externality. The chemicals discharged by an industrial platform into the waters of a lake can kill the fauna and flora, thereby affecting the livelihood of fishermen or farmers in the area. By contrast, a positive externality may arise from building a road to that industrial platform which can create opportunities for constructing buildings, commercial development, tourism, etc. Externalities occur when property rights or liability cannot be clearly determined/assigned.
TBL reflect the financial and manufactured capitals, the social and human capitals determine the social aspect, and the natural capital is linked to the environmental facet of TBL.

The model is relevant for our research not so much as a special model that proposes a strategic framework for addressing sustainability by managing the five capitals, but rather due to the generalizable conclusions that can be drawn from it.

Firstly, by conceptualizing the model in the form of five types of capital that have to be managed, it translates business sustainability into management language. The requirement of conserving the capital base is fundamental to managing organizations, being considered a prerequisite for responsible management (Dyllick and Hockerts, 2002). Therefore, the model emphasizes that business sustainability can be maintained only by simultaneous and responsible management of the economic, social and environmental capital of the company in order to prevent their depreciation.

Secondly, the model highlights the need to integrate strategically the economic, social and environmental aspects, which requires “the holistic management of five different types of capital that reflect an organization’s overall impact and wealth (in the broadest sense)” (The Sigma Project, 2003).

Finally, the fact that these types of capital must be continuously protected and developed reinforces, once again, the nature of business sustainability as a dynamic process, as we have shown in section 1.3.

We note that, although the three perspectives (economic, social and environmental) are considered simultaneously, the TBL model suggests implicitly and the Sigma model explicitly that the three dimensions are not equally important. The Sigma model states explicitly the paramount importance of the environmental dimension, as the existence of the other two depends on it. Morris (2000) also affirms the existence of a natural hierarchy of interdependence: environment – society – organization (see figure 1.6.1.2. underneath).

Business sustainability is conditional on the sustainability of the social system and both depend on the sustainability of the natural system. Similarly, the organization, through its behavior and results, influences (and even impacts) the sustainability of both society and the environment.
This hierarchy implies that the organizational performance on which business sustainability hinges is determined by higher rank conditions that shape the activity of the organization. Namely, certain performance criteria of a company that strives to be sustainable can be limited by the way the broader system works. In its turn, a firm’s sustainability performance is a prerequisite for the integrity of the social and natural systems. We will revisit this idea later in this book, as we believe it underlies some strategic concepts that are important for business sustainability: Creating Shared Value (Porter and Kramer, 2006, 2011), The Natural Step (Natural Step, 2012), Natural capitalism (Lovins, Lovins and Hawken, 1999).

Addressing the higher-level context of corporate sustainability Werbach (2009) extends the number of sustainable development dimensions to include the cultural aspect. His holistic perspective of business sustainability rests on what he calls “four coequal dimensions”, which are briefly described here:

- **Social** (involves behaviors that prove that people matter): conditions and actions that affect all members of society. This dimension refers to: poverty, violence, inequity, education, public health, labor rights and human rights.

- **Economic** (emphasizes profitable operations): aspects related to how people and businesses meet their economic needs. This dimension includes safe food, water, housing and comfort for people, as well as ensuring profits for the firm so that it can safely operate for an indefinitely long time.
– **Environmental** (adopts the generally held view of protecting and restoring the ecosystem). It includes actions and conditions that affect the ecology of the earth: climate change, preservation of natural resources, and prevention/elimination of toxic waste.

– **Cultural** (involves the appreciation and protection of cultural diversity). Actions through which communities express their identity and cultivate their traditions from generation to generation are part of this dimension.

Werbach (2009, p. 9) holds that a global corporation will not be sustainable unless its strategy for sustainability addresses all these dimensions simultaneously.

Despite all these considerations, the three "standard" dimensions of sustainability are poorly integrated in practice, most businesses limiting their approaches to combining two of them: either the economic and environmental or the economic and social facets (Smith, 2003).

We will review below several specific approaches to addressing the social and environmental dimensions of sustainability, after which we will revisit the holistic perspective.

### 1.6.2. The social dimension of business sustainability

Many authors refer to the social dimension of sustainable development and of business sustainability as “social sustainability”.

Smith (2003) notes that the literature addresses far less the social dimension of sustainability than the environmental dimension, the social dimension being the often omitted dimension of sustainable development (Colantonio, 2009). This is confirmed by Salzmann, Ionescu-Somers and Steger (2005), who believe that, both in theory and in practice, treating the environmental dimension of business sustainability is probably at least 10 years ahead of dealing with the social dimension. One reason is that social issues, such as the relationships with the employees and the community, as well as the results in this area, are more difficult to capture, quantify and assess. Boström (2012) also supports this view.

This is also due to the somewhat unclear terminology, to the lack of distinction in naming the sustainability initiatives that address social issues and those that aim environmental problems. For example, when dealing with corporate social responsibility (CSR), some authors think only about the environmental dimension,
others refer only to the social issue and still another category considers both dimensions (Salzmann, Ionescu-Somers and Steger, 2005). The confusion is favored by the term “CSR” itself, which refers explicitly to “social” while CSR initiatives legitimately address both social and environmental issues.

At the same time, the relatively greater importance currently given to the environmental facet of sustainability and CSR can explain why there are fewer guiding principles for the social side of sustainability in the models and strategic frameworks of sustainability proposed in the literature and used in practice.

However, the last years have witnessed notable achievements in addressing and integrating the social side of sustainability (Colantonio, 2009; Boström, 2012).

The Sigma Project (2001.a) holds there are at least three methods of addressing social sustainability:

– By means of substantive achievement. This approach to social sustainability resorts to values or levels to be attained relative to such aspects as: the minimum wage, the terms and conditions of payments to suppliers, the acceptable levels of return to shareholders, customer satisfaction, the role of animal testing in developing human drugs and treatments, etc.

– By delineation of the key issues of stakeholder concern. This alternative approach consists in defining both a minimum list of issues to address adequately and, possibly, the desired or acceptable outcomes to be obtained.

– By a specification of the nature of the process which can lead to sustainability. The third method looks at the processes through which a company interrelates with society; social sustainability is assessed based on the type, intensity and steadiness of those processes.

In the context of this book the process approach to social sustainability is of particular interest. It is considered to be the most robust by the authors of The Sigma Project, because it focuses less on certain specific values or levels that organizations should achieve. Instead, an organization assumes a real commitment to generate and maintain certain processes through which the organization’s social objectives are set together with the stakeholders. Consequently, the organization defines its social impact together with the relevant stakeholders. From the perspective of The Sigma Project this approach places corporate responsibility at the core of social sustainability. Therefore:
1. The organization dialogues with and assumes responsibility toward stakeholders.
2. The outcomes of the organization’s actions are socially acceptable when they are equitable and defined in partnership with its stakeholders.

At this point we also mention Boström (2012) who, when referring to the concrete social aspects that empirical studies and models of social sustainability most often address, finds that social sustainability refers both to the improvement of the living conditions of the current and future generations and to the quality of governing the process itself. As a result, the social dimension of sustainable development can be thought of as covering both procedural and substantive aspects concerning the purpose of social sustainability. If the substantive aspects refer to “What?” social goals is sustainability supposed to achieve, procedural aspects refer to "How?” to achieve those results. The author notes that substantive and procedural aspects overlap and, since a clear distinction between them is not always possible, he proposes to map the social sustainability-related topics to the two aspects (table 1.6.2.1).

Table 1.6.2.1. Examples of substantive (What?) and procedural (How?) aspects of social sustainability. Source: Boström (2012)

<table>
<thead>
<tr>
<th>Substantive aspects: What social goals to achieve?</th>
<th>Procedural aspects: How to achieve the social goals?</th>
</tr>
</thead>
<tbody>
<tr>
<td>✓ Basic needs such as food, housing, and income and extended needs such as recreation, self-fulfilment</td>
<td>✓ Access to information about risks and the sustainability project</td>
</tr>
<tr>
<td>✓ Inter- and intra-generational justice along gender, race, class, and ethnicity dimensions</td>
<td>✓ Access to participation and decision making at different stages of the process and over time</td>
</tr>
<tr>
<td>✓ Fair distribution of income</td>
<td>✓ Proactive stakeholder communication and consultation throughout the process</td>
</tr>
<tr>
<td>✓ Fair distribution of environmental “bads” and “goods”</td>
<td>✓ Empowerment for taking part in the process (e.g., awareness, education, networking, economic compensation)</td>
</tr>
<tr>
<td>✓ Equality of rights, including human rights, land user and tenure rights, and indigenous people’s rights</td>
<td>✓ Participating in the framing of issues, including defining criteria, scope, and subjects of justice</td>
</tr>
<tr>
<td>✓ Access to social infrastructure, mobility, local services, facilities, green areas, and so forth</td>
<td>✓ Social monitoring of the policy, planning, and standard-setting process</td>
</tr>
<tr>
<td>✓ Employment and other work-related issues, facilitating for local small and medium enterprises</td>
<td>✓ Opportunity for learning and self-development</td>
</tr>
<tr>
<td>✓ Opportunity for learning and self-development</td>
<td>✓ Community capacity for the development of civil society and social capital</td>
</tr>
<tr>
<td>✓ Community capacity for the development of civil society and social capital</td>
<td>✓ Security (e.g., economic, environmental)</td>
</tr>
<tr>
<td>✓ Security (e.g., economic, environmental)</td>
<td>✓ Health effects among workers, consumers, and communities</td>
</tr>
<tr>
<td>✓ Health effects among workers, consumers, and communities</td>
<td>✓ Social cohesion, inclusion, and interaction</td>
</tr>
<tr>
<td>✓ Cultural diversity and traditions</td>
<td>✓ Cultural diversity and traditions</td>
</tr>
<tr>
<td>✓ Sense of community attachment, belonging, and identity</td>
<td>✓ Sense of community attachment, belonging, and identity</td>
</tr>
<tr>
<td>✓ Social recognition</td>
<td>✓ Social recognition</td>
</tr>
<tr>
<td>✓ Attractive housing and public realm</td>
<td>✓ Attractive housing and public realm</td>
</tr>
<tr>
<td>✓ Quality of life, happiness, and well-being</td>
<td>✓ Quality of life, happiness, and well-being</td>
</tr>
</tbody>
</table>
Coming back to the Sigma Project we observe that it performs an analysis of the main standards, codes and frames of reference (codes and principles) that help organizations make a meaningful contribution to sustainable development. That analysis includes, among other things, the kinds of approach used to address sustainability (process or substantive), the dimensions of sustainable development looked at (economic, social, environmental) and the stakeholders taken into account. The level of management system involved in tackling sustainability is also analyzed: the strategic level (vision and principles), the operational level, and the indicators used. We sum up in table 1.6.2.2 some of the published results (The Sigma Project, 2001.b).

Table 1.6.2.2. The Sigma Project analysis of codes and standards. Source: The Sigma Project (2001.b)

<table>
<thead>
<tr>
<th>Standard</th>
<th>Which dimension</th>
<th>Which stakeholder</th>
<th>Process/ Substantive</th>
<th>Vision, Principles</th>
<th>Operational</th>
<th>Specific Indicator(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Global Sullivan⁴</td>
<td>Social, Environmental</td>
<td>Employees, Community, Business community</td>
<td>Substantive</td>
<td>YES</td>
<td>NO</td>
<td>NO</td>
</tr>
<tr>
<td>Global Compact⁵</td>
<td>Social, Environmental</td>
<td>Employees, Community</td>
<td>Substantive</td>
<td>YES</td>
<td>NO</td>
<td>NO</td>
</tr>
<tr>
<td>The Natural Step⁶ (TNS)</td>
<td>Environmental, Social, Economic</td>
<td>All</td>
<td>Process</td>
<td>YES</td>
<td>NO</td>
<td>NO</td>
</tr>
<tr>
<td>EFQM⁷</td>
<td>Social, Economic</td>
<td>Employees</td>
<td>Process</td>
<td>NO</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td>SA 8000⁸</td>
<td>Social</td>
<td>Employees, Employees of suppliers, Communities</td>
<td>Process, Substantive</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td>Investors in People⁹</td>
<td>Social</td>
<td>Employees</td>
<td>Process, Substantive</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
</tr>
</tbody>
</table>

It is worth noting that the employees, as stakeholders, receive the most attention. At the same time, the analysis highlights some shortcomings in the coverage of various other aspects, which include the supplier-related performance of

⁴ http://thesullivanfoundation.org/
⁵ www.unglobalcompact.org/
⁶ www.naturalstep.org/
⁷ www.efqm.org
⁸ www.sa-intl.org/
⁹ www.investorsinpeople.com
organizations and the lack of in-depth treatment of the economic aspects of sustainability.

1.6.3. The environmental dimension of business sustainability

A study of the literature reveals many routes organizations can take to become sustainable by contributing to a sustainable context, many of them focusing on the environmental dimension to the detriment of the social aspect (Smith, 2003; Senge et al., 2007).

To systematize the approaches based on the environmental facet of sustainability Smith (2003) suggests classifying them into four categories according to the complexity of the approach.

Those categories include approaches, methods of protecting the environment, which:

1. Reduce pollution, in compliance with existing legislation (Category 1).
2. Focus on the eco-efficiency of current products and processes (Category 2).
3. Require redesigning products and processes, so that their environmental impact is minimal throughout the entire life cycle (Category 3).
4. Transform not only the practices, processes and products of the organization, but also its purpose and values (Category 4).

In what follows we will adopt this classification as a guiding tool for reviewing and explaining the potentially strategic features of the various models and frames of reference available. The list of methodologies and frames of reference we will consider is not exhaustive, as compiling such a list would exceed the intended scope of the present book. Therefore, our discussion will draw on examples that serve to clarify the features we consider essential for the four categories of the classification shown above. Figure 1.6.3.1 below presents some representative methods in each of the four categories.

"End of pipe control" measures for reducing pollution bring changes to industrial processes and technologies only at the outer limit of the technology, at the point where pollutants would enter the environment (by utilizing filters, water treatment plants, decantation, etc.). These measures, when used alone, are reactive by nature, and designed to comply with existing regulations. They tend however to induce rising costs for the company, as regulations usually get tighter and tighter,
and new measures have to be adopted (Smith, 2003); the phenomenon follows a vicious cycle. Moreover, when they are singular such measures do not address at all two of the major requirements of sustainability: waste prevention and more efficient use of materials (Hawken, 1993 apud Smith, 2003).

#### Figure 1.6.3.1. Continuum of environmental approaches: from reductionist to holistic.
Compiled from: Smith (2003) and Senge et al. (2007)

<table>
<thead>
<tr>
<th>From Simple, Reductionist</th>
<th>To Complex, Holistic</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Category 1</strong></td>
<td><strong>Category 2</strong></td>
</tr>
<tr>
<td>“End of pipe control” measures for pollution reduction</td>
<td>Waste minimization</td>
</tr>
<tr>
<td></td>
<td>Pollution reduction</td>
</tr>
<tr>
<td></td>
<td>Cleaner production</td>
</tr>
<tr>
<td></td>
<td>Environmental management systems; environmental audit</td>
</tr>
<tr>
<td></td>
<td>Eco-efficiency</td>
</tr>
<tr>
<td><strong>Category 3</strong></td>
<td><strong>Category 4</strong></td>
</tr>
<tr>
<td>Life Cycle Analysis (LCA)</td>
<td>Industrial ecology</td>
</tr>
<tr>
<td>Eco-design</td>
<td>Natural capitalism</td>
</tr>
<tr>
<td>Zero Emissions Research Initiative</td>
<td>Biomimicry</td>
</tr>
<tr>
<td>Ecological footprint</td>
<td>Cradle to cradle</td>
</tr>
<tr>
<td></td>
<td>The Natural Step</td>
</tr>
<tr>
<td></td>
<td>Hannover principles</td>
</tr>
</tbody>
</table>

Unlike Category 1 measures, the methods in Category 2 address the major needs of environmental protection and, in addition, they lead to cost reductions. Therefore, enterprises generally implement this kind of measures proactively, with the goal of streamlining their activity. These methods are forms of continuous improvement of the existing products and practices, resulting in both economic and environmental benefits (Smith, 2003; Senge et al., 2008). They require single-loop learning, as it will be defined in section 2.1.1.3 of this book.

Although they generate clear benefits, the methods in Category 2 may become detrimental to the environment if applied without a systems perspective; the systems perspective is meant to approach the natural-industrial system holistically (Senge, Carstedt and Porter, 2001). Namely, Category 2 methods will definitely have a positive impact by reducing the amount of raw materials extracted and the manufacturing waste, but will reduce in no way or will even lead to an increase in the number of products manufactured and, implicitly, in the amount of waste resulting
from use or disposal.

The explanation is that innovations in the field of eco-efficiency are not targeted to affect the amount of products made or the amount of waste generated by their use or disposal. A more eco-efficient and more advanced industrial system can churn out much larger amounts of products, whose use or disposal can result in larger amounts of waste and, therefore, can have a much greater negative impact on the environment than a smaller and less eco-efficient industrial system (ibid.). In the words of Lovins, Lovins and Hawken (1999), without a fundamental rethinking of the system eco-efficiency can lead to an environmental disaster: the increasing “production of the wrong products, produced by the wrong processes, from the wrong materials, in the wrong place, at the wrong scale, and delivered using the wrong business models” is likely to cancel out the positive effect of the resources saved. A graphic representation (figure 1.6.3.2) can illustrate the phenomenon.

![Figure 1.6.3.2. Impact of eco-efficiency and equivalent methods (Category 2) on waste sources. Compiled from Senge, Cardstedt and Porter (2001), Smith (2003), Senge et al. (2007)](image)

The answer to this phenomenon is not necessarily "0 growth". However, a systems approach is required in order to reduce all sources of waste: from the manufacturing process to the use and disposal of products (Senge, Carstedt and Porter, 2001).

It is precisely this problem that the methods grouped in Category 3 attempt to address. They focus not only on how eco-efficient the manufacturing processes can
be made, but also on the eco-efficiency of the other two waste streams\textsuperscript{10} in figure 1.6.3.2, generated during the use of the products and after they are disposed of.

These methods require a fundamental rethinking of products and of how they are produced. Not only manufacturing processes must be rendered efficient, but also products must be designed so that they require less material, to be longer lasting, more efficient in use and to be recyclable or reusable at the end of their normal life cycle (Smith, 2003). Unlike the methods in Category 2 the methods in Category 3 aim to address already from the design stage of the product all possible sources of waste generation along the industrial chain, as represented in figure 1.6.3.3.

\textbf{Figure 1.6.3.3. Impact of Category 3 methods on waste sources. Compiled from Senge, Cardstedt and Porter (2001), Smith (2003), Senge et al. (2007)}

Here are a few notes related to the above figure:

- Extraction: designing products with a reduced use of materials; materials are selected so that they have a low environmental impact.
- Production: designing manufacturing processes to ensure cleaner production.
- Distribution – rethinking distribution chains to make distribution more eco-efficient.
- Products in use – ensuring a minimal environmental impact through: low emissions, minimum energy consumption, water conservation, product long life and provision of eco-efficient repairs and maintenance.

\textsuperscript{10} Gas emissions, wastewater, etc. are all considered "Waste".
End-of-Life considerations: designing the product or its components so that it/they can be reused, reintroduced into production, recycled or collected and stored ecologically (ANZECC, 1998 apud Smith, 2003).

As a result of all of the above, Category 3 measures will have a positive impact by reducing the amount of raw materials extracted and of the waste resulting from all stages of the industrial chain.

Moving now on to the methods and frames of reference in Category 4 we find that they incorporate many methods of Category 3. They are, however, fundamentally different since they are able to transform completely the way organizations address sustainability, to change the organizational purpose and values, the processes and practices organizations apply, as well as the business models they use (Smith, 2003). Category 4 methods are systemic, complex schemes, involving not only intra-organizational holistic approaches, but also inter-organizational collaboration initiatives in order to optimize the global environmental and societal impact of certain industries, sectors (Smith, 2003) or economic clusters (Porter and Kramer 2011). They promote a systemic perspective and are based on principles derived from the way the broader, social and natural, systems function. Those principles are considered indispensable for the integrity and sustainability of the natural and social systems (Senge, Carstedt and Porter, 2001), which we have also highlighted in section 1.6.1.

For instance, one of the key natural principles is cyclicity and the absence of waste, the waste of a system component becoming another component’s nutrient (Senge, Carstedt and Porter, 2001), as represented in figure 1.6.3.4 below.

Therefore, industrial systems modeled on natural principles are themselves circular and try to eliminate waste or generate significant reduction in all waste streams. This means applying simultaneously three waste-reduction strategies: ensuring the productivity of the resources, making clean products, and remanufacturing, recycling and composting. The three strategies are present, for example, in all principles of Natural Capitalism (Lovins, Lovins and Hawken, 1999), in three of the four Systems Conditions of The Natural Step model (Holmberg and Robert, 2000) and among the Hannover Principles (McDonough, 1992).
To illustrate, the principles of the Natural Capitalism model, so called because it “is what capitalism might become if its largest category of capital – the natural capital of ecosystem services – were properly valued” (Lovins, Lovins and Hawken, 1999, p. 146) are:

– **Radical productivity of resources** – the dramatic increase in the productivity of natural resources, by improving the level of utilization of natural resources five, ten or even a hundred times, by means of technological innovations.

– **Ecologic redesign** – moving toward biologically inspired models in order to eliminate the concept of “waste”. In closed, circular industrial systems, by industrial ecology one manufacturer’s waste becomes the nutrient of another (industrial nutrient) or it is supplied to the ecosystem as fertilizer (natural nutrient).

– **Transforming current business models into solution-based business models** – means moving from providing goods to customers to selling them services that meet their needs. While in the traditional "product-based" model the customer is the one who buys and owns the product, thus becoming responsible for disposing of it, the "service flow" model consists in the manufacturer maintaining ownership of the product, which encourages the manufacturer to design and develop products that are long-lasting. Maintaining ownership allows the manufacturer to withdraw the product at the end of its life cycle for recycling, reuse, etc.

– **Reinvesting in natural capital** – organizations should restore, maintain and expand their natural capital, so that it would enable them to produce more abundant goods and services.
The four principles are interrelated, each of them generating both constraints and synergies in relation to the others (Senge et al., 1999). Their disjoint implementation, though, can cause disservice to the natural system rather than benefits, a situation similar to the one emphasized earlier in our discussion on the Category 2 methods.

By applying the principles of Natural Capitalism the linear industrial system appearing in figure 1.6.3.3 becomes circular, closed in terms of the waste streams (Senge et al., 1999).

According to the aforecited authors, the value of the frame of reference proposed by the Natural Capitalism concept derives precisely from addressing all major dimensions along which an industrial system interacts with nature. However, the model’s usefulness in addressing sustainable development is limited by its failing to address the social dimension.

By contrast, the Systems Conditions (Holmberg, Robert, 2000) proposed by The Natural Step (TNS) model contain, along with the three environmental strategies discussed previously (raising resources’ productivity, making clean products, and remanufacturing, recycling and composting), an explicit social dimension (Natural Step, 2012). We present the Systems Conditions and detail them as guiding sustainability principles in table 1.6.3.1.

Table 1.6.3.1. The Natural Step: systems conditions and guiding principles.
Source: Natural Step (2012)

<table>
<thead>
<tr>
<th>Systems Conditions</th>
<th>Reworked as Sustainability Principles</th>
</tr>
</thead>
<tbody>
<tr>
<td>In a sustainable society, nature is not subject to systematically increasing:</td>
<td>To become a sustainable society we must eliminate our contributions to:</td>
</tr>
<tr>
<td>1. concentrations of substances extracted from the earth’s crust,</td>
<td>1. the systematic increase of concentrations of substances extracted from the Earth’s crust (for example, heavy metals and fossil fuels).</td>
</tr>
<tr>
<td>2. concentrations of substances produced by society,</td>
<td>2. the systematic increase of concentrations of substances produced by society (for example, plastics, dioxins, PCB(^{11}) and DDT(^{12})).</td>
</tr>
<tr>
<td>3. degradation by physical means, and</td>
<td>3. the systematic physical degradation of nature and natural processes (for example, overharvesting forests, destroying habitat and overfishing), and</td>
</tr>
<tr>
<td>4. in that society, people are not subject to conditions that systematically</td>
<td>4. conditions that systematically undermine people’s capacity to meet their basic human needs (for example, unsafe working conditions and not enough pay to live on)</td>
</tr>
<tr>
<td>undermine their capacity to meet their needs</td>
<td></td>
</tr>
</tbody>
</table>

\(^{11}\) PCB - Polychlorinated Biphenyl  
\(^{12}\) DDT - Dichlorodiphenyltrichloroethane
In the social dimension the concept of basic human needs (see sustainability principle 4 in table 1.6.3.1) is derived from the research of the Chilean economist Manfred Max-Neef. He identifies nine fundamental human needs in the axiological category\(^{13}\): Subsistence, Protection, Affection, Understanding, Participation, Creation, Leisure, Identity and Freedom (Max-Neef, 1991). The author points out that those fundamental human needs cannot replace or compensate each other and that a need that is not satisfied generates deprivation relative to a desirable human condition.

The Systems Conditions of TNS define the minimum conditions necessary for sustainable development. Given the close relationship between business sustainability and the sustainable development of society, the guiding principles in table 1.6.3.1 above may serve as a guide to making strategic decisions for a company’s road to sustainability (Cortese, 1999).

### 1.6.4. Putting the holistic approach to sustainability to work

To facilitate understanding how the various approaches, models and frames of reference for sustainability are related and what the fundamental challenges of operationalizing sustainability are, Senge et al. (2007) found it useful to map all those schemes to the three stages of an organization’s management system: the strategic level, operational level, and evaluation and reporting of the results. The resulting mapping is shown in figure 1.6.4.1 further down.

The various models and frames of reference correspond to different levels of the management process. Details follow below.

*Strategies* can be regarded as long-term guidelines for managerial decision. Consequently, the strategic level in the mapping scheme advanced by Senge et al. (2007) collects models that can suggest such long-term guidelines and provide inspiration for generating sustainability strategies.

In our view, both the models listed in Category 4, introduced in the previous section (figure 1.6.3.1), and the CSV concept put forward by Porter and Kramer (2006, 2011) qualify as frameworks at the strategic level. As we have shown in the previous section they can change everything from organizational values, vision and

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\(^{13}\) Max-Neef organizes human needs into two categories called existential (Being, Having, Doing and Interacting) and axiological. Axiological needs refer to value, i.e., people will strive to meet a need that they value or believe to be worthy of being fulfilled.
mission to the business models, processes and practices resorted to.

Strategy execution requires the capability to incorporate the result of the strategy formulation process into company policies and operationalize them; it is as important as developing a sound strategy (Cândea, 2007). Steady changes in the ways an organization operates, in its practices, occur only when those changes equally affect the operating policies, the priorities and thinking patterns (often tacit) that shape the decision-making processes and, not least, the organizational culture. Another important aspect of execution is the metrics to be monitored in order to track and assess specific business processes. They need to be explicit, detailed and are often natural points of focus of the change efforts.

Along the same lines we can analyze the sustainability-related methods in Categories 2 and 3 presented earlier. In the mapping scheme in figure 1.6.4.1 those methods are tied to operating policies and metrics used to track the success or failure of a company’s progression toward certain sustainability objectives. They pertain to the execution of some strategy whose formulation is not part of the method per se. This is the reason why, as we have already mentioned, those methods give sustainability a local, partial treatment, which is the opposite of the systemic, holistic approach of Category 4 methods.

The last step in figure 1.6.4.1 denotes that what matters, eventually, are the

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**Figure 1.6.4.1. A strategic perspective: mapping environmental protection methods to the levels of the management system. Adapted from: Senge et al. 2007**

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The last step in figure 1.6.4.1 denotes that what matters, eventually, are the
overall results the company achieves, evaluated on specific metrics that assess progress toward economic, social and environmental sustainability goals. A good example in this respect is the indices developed by the WBCSD.

1.7. Conclusions on the strategic approach to sustainability

While summarizing the previous discussions we will make a few remarks, using the structure provided by figure 1.6.4.1, about how companies operationalize the various approaches to sustainability.

1.7.1. Joining strategic sustainability orientations with business strategy into a business sustainability strategy

Mapping the various models and frameworks for addressing sustainability to one of the three levels of the management process differentiates the strategic approaches to sustainability from the purely operational ones and indicate the way models interrelate and are potentially complementary. Strategic approaches to sustainability have a long-term orientation, affect the entire company and subordinate the range of operational modes of action. They can be exploited to their full potential when inextricably intertwined with a company’s business strategy so that an integrated business sustainability strategy is developed.

This is consistent with the views advanced in the literature on how to align the interests of the company and society. Some authors whose proposals are representative for the topic are mentioned below:

– Hart (1997) – treats the theme of including environmental concerns in the business strategy; later on he adds the implications of poverty for business strategy;
– Porter and van der Linde (1999) – hold that business competitiveness can be built with eco-efficiency, by speedy environmental innovation and by cost reductions in the value chain;
– Porter and Kramer (2002) – look at what they call “context-focused philanthropy”, which is corporate philanthropy materialized as an investment in the competitive context of the corporation;
– Porter and Kramer (2006, 2011) – introduce the concept of “creating shared value” by exercising strategic CSR, which emphasizes the creation of benefits to society that will then reflect profitably at the company level;
– Prahalad and Hammond (2002); Prahalad and Hart (2002) – advocate
serving the people at the "bottom of the economic pyramid"\textsuperscript{14}, the world’s poor and underserved, which can bring prosperity both to the targeted socioeconomic segment and to the companies capable of developing such strategies.

1.7.2. The evolution of a company toward sustainability – a continuous learning process at the strategic level

The road to sustainability is essentially a learning process; it requires not only changes oriented externally, such as sustainability-related metrics and reporting, but also internal changes. Internal changes refer to a change in the vision and mission, in the organizational values and, implicitly, in the organizational culture. Operating policies have also to change and, last but not least, new frameworks of management thinking have to be put in place (Senge et al., 2007).

We are talking, hence, about a fundamental learning process that influences both the formulation of strategies and the execution, as suggested by the learning flywheel presented in section 1.4.1 of this book. The success of this learning process is extremely important because it strengthens the strategic management process. A well-run strategic management process is a prerequisite for the development of a good strategy for business sustainability (Wirtenberg, Russell and Lipsky, 2008).

In the end, a good business sustainability strategy is the strategy that guides a company to construct its sustainable competitive advantage.

1.7.3. Addressing business sustainability in a specific manner

The model in figure 1.6.4.1 suggests that companies have to develop specific ways of addressing sustainability. This is so because the strategic guidelines, policies, metrics and organizational practices must be adapted to the people, culture, history and technology of the company as well as to its industry, market and competitive arena, to the communities in which the company operates (Senge et al., 2007).

If we want to make a business sustainable we can start off with the “classic” process of developing sustainable competitive advantage: either by improving the firm’s capability to be different from its competitors through market positioning and aligning in a unique way its internal resources (Porter, 1996; Porter and Kramer, \textsuperscript{14} The bottom of the economic pyramid (BOP) – the term refers to the four billion people worldwide who have an income of less than 2 dollars per day.}
2006; Porter and Kramer, 2011), or by developing particular core competences (Prahalad and Hamel, 1990) or strategically-relevant resources (Barney, 1991) that are difficult or impossible to imitate by competitors. The “classic” way needs adapting in order to incorporate systems thinking in the process. Systems thinking will help us grasp the broader perspective based on which we will see that for business competitive advantage to be sustainable we need to look beyond shareholders, customers and competitors and also consider other stakeholders coming from the natural and social environments, the stakeholders that are relevant for that particular firm’s prosperity in the long term.

1.8. Our hypothesis

The different attitudes that companies have about the sustainability imperative, noted in the previous section, raise the legitimate question about why businesses adopt sustainability strategies or not and show concern to a higher or lesser degree for society and the environment.

Cândea (2010) points out as possible causes, on the one hand, different abilities to perceive the connection between a socially responsible behavior and the long-lasting business prosperity and, on the other hand, a company's ability to incorporate such concerns into its policies and strategies. The author raises the question of how to build an organization so as to be better positioned than others to develop a path toward sustainability.

We therefore address the problem of identifying and studying a company's internal characteristics that shape such competences as needed to support the company with its sustainability-oriented efforts. So, which are the internal features that encourage organizations to take the road toward sustainability?

Cândea (2007a) advances the hypothesis that a company that aspires to become a learning organization stands better chances of becoming sustainable. The author argues that it is reasonable to assume that a learning organization will be naturally inclined to conceive strategies for sustainability since the disciplines of systems thinking and mental models\textsuperscript{15} will make the company question the "traditional" strategic models, limited to customers and the market, while becoming aware that it belongs to a larger system of interdependent stakeholders.

\textsuperscript{15} The dimensions of a learning organization, called "disciplines" by Senge (1990), will be addressed in section 2.2.2.
Senge et al. (2008) note, too, that the development of proactive and sustainability-oriented strategies requires a transition from a culture of reaction to the operating environment to a culture based on innovation and creativity, on cultivating a systems perspective in the company, on mobilizing imagination, commitment, patience and perseverance of the people in the company.

We propose in this book to explore the strategic role of the characteristics of a learning organization in improving organizational sustainability, our assumption being that a learning organization has better prospects of becoming sustainable because it enjoys superior capabilities of developing and implementing a strategy for sustainability.

Throughout this book we essentially argue that the dimensions of the learning organization are important for business sustainability and we develop a conceptual model of their role in developing the characteristics of a company that enjoys high sustainability prospects.
2. THE LEARNING ORGANIZATION: INTERNAL AND EXTERNAL INTEGRATION

2.1. Organizational learning

Complexity, divergence and even confusion are the terms that can describe the current state of knowledge about what characterizes the learning organization and what contributes to organizational learning, namely the purpose of organizational learning and its nature (Leuci, 2005).

With regard to the existing theories and research on the learning organization and organizational learning, Sun and Scott (2003) notice on the one hand their fragmentary and highly diverse nature, because of the holistic quality of the learning organization and due to the multidisciplinary approaches to studying it; on the other hand there is a divide between practitioners and theoreticians relative to the way of addressing the concepts: in a prescriptive or descriptive manner.

The two concepts: organizational learning and learning organization have been regarded as interchangeable and used as such until the 1990s. After Senge (1990) disambiguated the terms by defining the "learning organization" the two notions have acquired distinct meanings and became independent of each other (Sun and Scott, 2003; Örtenblad 2001).

Organizational learning has captured primarily the attention of the academic world (Örtenblad, 2001; Tsang, 1997), the theories put forth having a descriptive nature; they emphasize the learning processes in organizations and originate in the cognitive and social psychology (Sun and Scott, 2003). The concept of learning organization, however, has caught the attention of practitioners and consultants in particular (Örtenblad, 2001; Tsang, 1997); the resulting research and theories have a strong prescriptive nature (Sun and Scott, 2003) and a multidisciplinary inspiration from fields such as psychology, organizational learning, management and organizational development, systems theory (open systems, complexity theory, cybernetics), conflict theory, etc.

Örtenblad (2001) notes that the literature still perpetuates confusion between the two concepts and considers it necessary to clarify the distinction between them; he identified criteria for this (see them summarized in table 2.1.1):

- Organizational learning refers to (learning) processes or activities within the organization while the learning organization is a form of organization.
While organizational learning is a descriptive concept, the learning organization is a normative one. This distinction has several implications. Firstly, while organizational learning exists naturally in organizations, with no effort needed to elicit it, the learning organization requires a targeted and conscious effort to bring it into being. This means that all organizations have some form of organizational learning while only some of them are (or aspire to be – note ours) "learning organizations". Then, on the one hand the learning organization is a desirable ideal that firms should pursue, although developing in that direction is not a prerequisite for the survival of an organization. On the other hand, organizational learning is a realizable process, necessary for the survival of any organization.

Table 2.1.1. Contrasting concepts: organizational learning and learning organization. Summarized from Örtenblad (2001)

<table>
<thead>
<tr>
<th>ORGANIZATIONAL LEARNING</th>
<th>LEARNING ORGANIZATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>TYPE (CHARACTER) INCLUDED</td>
<td></td>
</tr>
<tr>
<td>Processes</td>
<td>Organizational form</td>
</tr>
<tr>
<td>NORMATIVITY DEGREE</td>
<td></td>
</tr>
<tr>
<td>Descriptive</td>
<td>Normative</td>
</tr>
<tr>
<td>- exists naturally</td>
<td>- requires activity</td>
</tr>
<tr>
<td>- neutral</td>
<td>- preferable</td>
</tr>
<tr>
<td>- necessary</td>
<td>- not necessary</td>
</tr>
<tr>
<td>- achievable</td>
<td>- ideal</td>
</tr>
<tr>
<td>TARGET GROUP</td>
<td></td>
</tr>
<tr>
<td>Academic</td>
<td>Practitioners, consultants</td>
</tr>
</tbody>
</table>

Sun and Scott (2003) propose the following definitions in order to distinguish between the two concepts:

- The organizational learning "is the learning process used in the organization. It deals with the question of how individuals in the organization learn". The learning process in organizations can result in a change in behavior and can be useful to the organization. Both behavior change and usefulness are just possible outcomes of the process, whereas a change in "knowledge" must take place (Tsang, 1997).
The learning organization is the environment where learning occurs; learning results in a change in behaviors and in the progress of the organization in the desired direction. Learning must be transferred from individuals to communities and on to the organization, and the other way around, and must result in changing behaviors (Sun and Scot, 2003).

The learning process in the learning organization

Addressing the way in which the transfer of knowledge from individuals to the community/organization occurs and vice versa, Marsick, Bitterman and van der Veen (2000) hold that social units (groups, organizations) can learn collectively and they do this with the help of their members. This requires that a certain percentage of the people belonging to the social unit have common values and goals. In order for this to happen a negotiation process among differing points of view has to take place. This negotiation may lead, ideally, “to an enriched, integrated perspective built upon free, full, open, fair, and critical dialogue” (Marsick, Bitterman and van der Veen, 2000, p. 3).

According to the same authors, the learning process at the level of the social units is based on four key elements:

- Groups cannot learn unless they have the ability to collaborate and identify conflict in a constructive manner.
- Learning is shared internally and externally through clear communication; ideally, communication is no longer unidirectional and hierarchical, and individuals participate regardless of the organizational hierarchy.
- Individuals need the ability and permission to think critically and to act autonomously. When this happens, it is unlikely that people will not share their ideas. They will recognize when standard behaviors are no longer optimal and will work together to rethink old solutions or to develop new ones that can better meet the new challenges.
- Learning is a creative, continuous process of inventing new solutions to new challenges.

Crossan, Lane and White (1999) propose a conceptual framework of how organizational learning takes place, which analyzes how individual learning develops collective learning. They argue that organizational learning occurs at three levels: individual, group and organizational, each level fueling the learning processes of the
other levels. The authors identify four core processes that connect these levels, all processes entailing both cognitive and behavioral changes: 1) Intuiting; 2) Interpreting; 3) Integrating; 4) Institutionalizing. The model is summarily presented in table 2.1.2.

Table 2.1.2. A theoretical model of organizational learning. Source: Crossan, Lane and White (1999)

<table>
<thead>
<tr>
<th>Level</th>
<th>Processes</th>
<th>Means</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual</td>
<td>Intuiting</td>
<td>Experiences</td>
</tr>
<tr>
<td>Group</td>
<td></td>
<td>Images</td>
</tr>
<tr>
<td>Organization</td>
<td></td>
<td>Metaphors</td>
</tr>
<tr>
<td></td>
<td>Interpreting</td>
<td>Language</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cognitive maps</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Conversation/Dialogue</td>
</tr>
<tr>
<td></td>
<td>Integrating</td>
<td>Shared understanding</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Negotiation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Interactive systems</td>
</tr>
<tr>
<td></td>
<td>Institutionalizing</td>
<td>Plans/routines/norms</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Diagnosis systems</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Rules and procedures</td>
</tr>
</tbody>
</table>

*Intuiting* is a subconscious learning process that occurs at the individual level as a result of personal experiences. Individuals use the metaphors and images their experiences contain in order to explain new intuitions and experiences, and to share them with others. Therefore, metaphors mark the start of the interpreting process.

Through the process of *interpreting* individuals develop cognitive maps of the various areas in which they operate. Language plays a pivotal role in the development of those maps, since it enables the individual to name and explain what were initially just sensations, intuitions and feelings. Interpreting is, therefore, the process by which the individual realizes (at least some of) what he/she learned and shares it with his/her group by conversation and dialogue.

While in the case of interpreting it is the change in the individual’s level of understanding and action that is essential, the *integrating* process emphasizes coherent, collective action. This requires the existence of a shared understanding at
group level. It occurs as a result of dialogues and conversations within the group and of mutual adaptation and negotiation among its members. Integrating occurs by changing the mental models at the group level; integrating is the process that links learning at the individual level to learning across the organization by learning at group level.

The process of institutionalizing sets organizational learning apart from ad hoc individual or group learning. The underlying assumption is an organization is more than just a group of individuals and, therefore, organizational learning is more than the mere sum of what its members learnt (Crossan, Lane and White, 1999, p. 531). Although individuals may leave the company, what they have learned, as individuals or in groups, stays in the organization, embedded through the institutionalizing process in its strategies, systems, structure, routines, norms and in the knowledge management system as well (Mintzberg et al., 1995).

2.1.1. Organizational learning from the perspective of the theories of action

A model of the individual and organizational learning process, fundamental for conceptualizing the learning organization, is the one that results from the theories of action developed by Chris Argyris and Donald Schôn. Their work over the past three decades addressed the study of conscious and unconscious reasoning processes (Dick and Dalmau, 1990 apud Anderson, 1994).

To look at human behavior from the perspective of action means to see it as constituted by the meanings and intentions of agents16 (Argyris, Putnam and McLain Smith, 1985, p. 80).

Agents design and take action in order to achieve intended consequences and monitor the results to find out if their actions had the desired outcomes. They construct internal representations of their environment, by assigning meanings and senses, representations that guide their actions. By monitoring the effectiveness17 of their actions, agents equally test the validity of their construct of the environment

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16 According to The Concise Oxford Dictionary (1998), an agent is a person who or through whom power is exerted or who produces an effect. In this book we will use the term with the meaning of "a person who exerts power or produces an effect", in accordance with the view expressed by Shardlow (1990): "Agents do things, they act: that is why they are called agents".

17 Effectiveness assumes actions leading to the results people pursue – outcomes that last (Argyris in Christensen, 2008). Argyris (1970) defines efficiency as the achievement of established goals with the acceptable use of resources, effectiveness consisting of efficiency plus adaptability; adaptability means the ability to change objectives when circumstances require it (Zlate, 2004).
To conceive their actions, human agents need to construct mentally a simplified representation of the environment and to define a manageable set of causal theories that prescribe how to achieve the intended outcomes. It follows that people form in their brains "mental maps" about how to design, implement and review their own actions (Argyris, Schön, 1974). Furthermore, they will use these maps to also understand and interpret the actions of other human agents (Argyris, 1991).

Since it would be inefficient to reinvent the representation of the environment and the set of causal theories every time an action has to be conceived, human agents develop and learn, with time, a repertoire of representations, concepts, schemes and strategies. They also develop "programs" that help them access this repertoire. Agents will use those mental programs in the process of conceiving the actions needed to obtain the intended outcomes in each specific situation.

Argyris, Putnam and McLain Smith (1985) call these programs or maps *theories of action* and hold that they determine all deliberate human actions.

Theories of action can be conceptualized as very large sets of sentences that are interrelated in a complex manner. An example of a simple sentence in a theory of action is: "In situation $s$, in order to obtain consequence $c$, do action $a$" (Argyris and Schön, 1974).

### 2.1.1.1. Espoused theory and theory-in-use

Argyris and Schön (1974) note that there are two theories of action, which they call "espoused theory" and "theory-in-use". The *espoused theory* is the one people *claim* to use to govern their actions (Argyris, Putnam and McLain Smith, 1985). It reflects most of the time people's ideas – in fact their ideals – about what they consider to be an efficient action, revealing their values and views of the world. This is why the espoused theory is what people strongly believe in and what they claim and believe they are applying (Argyris, 2000). This type of thinking works mostly when people deal with routine problems. In such cases, what people say and how they actually behave are pretty much the same (Argyris in Christensen, 2008).

But when it comes to complex issues, which can cause embarrassing situations or represent a threat to the individual or the organization, the espoused
theory is almost never applied (ibid.). In those moments, it is the theory-in-use that governs how individuals acts in reality. It produces real, concrete actions, and it can be inferred only by following how the person acts (Argyris, Putnam and McLain Smith, 1985).

Most people are not aware that the theory (maps) they use in order to take action and understand the actions of others is actually different from the theory they embrace (Argyris and Schön, 1974). “We all possess a strong propensity to hold inconsistent thoughts and actions”, states Chris Argyris in an interview for Rotman Magazine, “the difference between espoused theories and theories-in-use applies at the level of national strategies, organizational strategies and small group and interpersonal behaviors” (Christensen, 2008, p. 10). This is one of the paradoxes of human behavior (Argyris, 1991).

Moreover, very few people are aware of the theory of action they actually use (Argyris, 1980 apud Anderson, 1994). They may become aware of it afterward, but while they exhibit the behavior they are rarely aware of it, which makes their actions much less effective than they could be (Christensen, 2008).

Hence it can be stated that theories-in-use are most frequently tacit cognitive maps (Argyris, Putnam and McLain Smith, 1985).

The existences of the two types of theories of action and the fact that the theories-in-use are mostly used unconsciously have important consequences for individual and organizational learning.

To reveal these consequences we present below the model developed by Argyris and Schön (1974) for the theories-in-use. Then we will describe the specific features that define the theories-in-use employed by most of the people who operate in an organizational environment (Argyris, 2000) and we will review their consequences for individual and organizational learning.

2.1.1.2. The general model of the theory-in-use

Theory-in-use models can be developed following the scheme in figure 2.1.1.2.1 further down.

This framework is the general model of the theories-in-use and explains the process of developing a theory-in-use (Argyris, Putnam and McLain Smith, 1985). There are three elements to look at:

– **Governing variables** – they are the parameters that the human agent
seeks to satisfy. Each parameter can be conceptualized as a variable evolving along a continuum of values; along that continuum there is a preferred range of values. For example, an individual may wish that the variable "anxiety" does not reach too high a value; but it is equally possible he/she may not wish it to be zero either since this will bring boredom. An individual lives in a space with many governing variables. However, they are ignored as long as their values stay within a range of acceptable values. When one of them moves outside the bounds considered acceptable the agent intervenes with action strategies.

![Diagram](image)

**Figure 2.1.1.2.1. Theory-in-use model. Source: Argyris, Putnam and McLain Smith (1985)**

- **Action strategies** – those are sequences of actions used by the agent in order to maintain the governing variables within an acceptable range of values in a particular situation.

- **Consequences** – they are what happens as a result of an action with behaviors, learning and effectiveness. Relative to intentions the consequences of the action strategy can be of two kinds. For one, there are the intended consequences, namely those that the agent believes will result from his actions, by which he wants to keep the governing variable within the acceptable range. Then, there are the unintended consequences, which the agent had no intention to produce. Both intended and the unintended consequences can be productive or unproductive.

This model has a major implication for understanding individual and organizational learning. To understand the mechanisms we will describe the feedback loops existing in the model, feedback that can run from the consequences
to the action strategies and governing variables.

2.1.1.3. Single-loop learning and double-loop learning

As long as the consequences are what the agent wanted, there is a match between intentions and outcomes and the agent’s theory of action is confirmed.

If, however, the consequences are unintended and, furthermore, if they are counterproductive relative to the governing variables, the agent finds a mismatch between intentions and outcomes, in other words he finds an error (Argyris, Putnam and McLain Smith, 1985).

Learning can be defined as the detection and correction of errors (Argyris, 2002). Argyris, Putnam and McLain Smith (1985) identify and define two types of response to errors, in other words two types of learning.

The typical first reaction is to incriminate the action strategy for the error and to question it. This leads to seeking and selecting another action strategy, which should supposedly lead to consequences that satisfy the governing variables. The cycle thus defined, in which the occurrence of an error prompts the search and use of new action strategies in order to satisfy the same governing variables, defines the single-loop learning.

The second possibility is to question even the governing variables. This may lead to changing them and, implicitly, the action strategies. The cycle thus defined, in which the generation of an error calls for seeking and making use of new governing variables, implicitly inventing a new set of action strategies, characterizes the double-loop learning. Figure 2.1.1.3.1 underneath presents the two types of learning.

An example helps clarify the differences between the two types of learning. During a meeting a manager wants to prevent negative feelings from occurring (governing variable). So, he is careful not to bring up topics that are likely to cause controversy (action strategy), hoping to avoid conflict (intended consequence). Nevertheless, the other participants attempt to bring up sensitive, controversial topics (intention-outcome discrepancy, namely an error has occurred).

In a typical cycle of single-loop learning the manager may try to discuss volubly about topics that he/she assumes everyone agrees with (one action strategy) or to charge the others with wasting time and suggest focusing on the subject on the agenda (another action strategy). This will possibly lead to avoiding conflict (intended
A solution consistent with double-loop learning would be for the manager to decide to encourage open inquiry (governing variable) instead of avoiding conflict. In this case, the chosen action strategy can be, for example, an open discussion of conflicting issues (action strategy), which might lead to analyzing and clarifying the controversial issues and, thus, avoiding future conflicts (intended consequence).

Argyris and Schön (1974) consider double-loop learning to be more effective for making informed decisions about the way actions are designed and implemented. Therefore, they center on double-loop learning and develop models of theories-in-use in which the governing variables differ in the way they inhibit or strengthen double-loop learning. The models are presented hereunder.

2.1.1.4. Model I theories-in-use

Model I theories-in-use describes characteristics that inhibit double-loop learning. A summary is presented in table 2.1.1.4 below.

Argyris, Putnam and McLain Smith (1985) claim that virtually all individuals who were tested in previous experiments (Argyris, 1976, 1982) operate, especially in situations they perceive threatening or embarrassing, with model I theories-in-use in spite of the fact that, at the level of espoused theories, those individuals differ widely.

<table>
<thead>
<tr>
<th>Governing variables</th>
<th>Action strategies</th>
<th>Consequences for the behavioral world</th>
<th>Consequences for learning</th>
<th>Effectiveness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Define goals and try to achieve them</td>
<td>Design and manage the environment unilaterally (be persuasive, appeal to larger goals)</td>
<td>Actor seen as defensive, incongruent, competitive, controlling, fearful of appearing vulnerable, manipulative, withholding feelings, overly concerned about self and too little concerned about others</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maximize wins, do not lose</td>
<td>Own and control the task (claim ownership of the task, be the guardian of defining and executing the task)</td>
<td>Defensive interpersonal and group relationships (dependence upon the actor, little involvement from others)</td>
<td></td>
<td>Self-sealing</td>
</tr>
<tr>
<td>Prevent negative feelings from occurring or being expressed</td>
<td>Unilaterally protect yourself (speak with inferred categories accompanied by little or no directly observable behavior, be blind to impact on others and to the incongruity between rhetoric and behavior, reduce incongruity by defensive actions such as blaming, stereotyping, suppressing feelings, intellectualizing)</td>
<td>Defensive norms (mistrust, lack of risk taking, conformity, external commitment, emphasis on diplomacy, power centered competition, rivalry)</td>
<td></td>
<td>Reduced long-term effectiveness</td>
</tr>
<tr>
<td>Be rational</td>
<td>Unilaterally protect others from being hurt (withhold information, create rules to censor information and behavior, hold private meetings)</td>
<td>Little freedom of choice, reduced internal commitment, low risk taking</td>
<td></td>
<td>Little testing of ideas publicly, more testing in private.</td>
</tr>
</tbody>
</table>
Similarly, although individuals differ from one another in the weights assigned to each governing variable and action strategies, their common denominator seems to be model I theories-in-use.

We reiterate here that the theories-in-use are mostly tacit cognitive maps. This is why individuals are not aware of the difference between the espoused theories of action and the theories that actually govern their actions.

As we have already shown in the table above, the four governing variables of model I can be formulated as: 1) Achieve the purpose as you have defined it; 2) Win, do not lose; 3) Suppress negative feelings; 4) Be as rational as possible.

These variables involve primary action strategies aimed to unilaterally control the environment and the task and to unilaterally protect oneself and the others. Thus, the underlying action strategy is the unilateral control over others (Argyris, Putnam and McLain Smith, 1985, p. 89).

According to the same authors, characteristic ways of implementing this strategy are: making unjustified evaluations, attributions or meanings, advocating courses of action in ways that discourage inquiry, treating and expressing one’s own views as obviously correct, using various avoidance strategies (for example: masking or hiding data perceived as potentially dangerous or embarrassing, making dual ambiguous statements).

The successful implementation of these strategies should lead to gaining control over others and to avoiding the possibility of being controlled by them.

However, they inhibit communication and generate defensive reactions, designed to protect the individual. Therefore, the consequences of using model I theories-in-use include defensive interpersonal and group relationships, reduced production of valid information and low freedom of choice (ibid., p. 89).

**Defensive routines: defensive reasoning and behaviors**

Model I theories-in-use determine individuals to design and use defensive actions in order to protect themselves and others (Anderson, 1994). For this reason, the model I of theories-in-use is seen as deeply defensive (Dick and Dalmau, 1990; Argyris, 2000), dominated by loops that encourage defensive reasoning and behaviors.

For individuals who base their actions on theories-in-use consistent with model I, the role of the governing values is to avoid embarrassing situations or
threats, or negative feelings such as vulnerability or incompetence.

Under the pressure of those values, such an individual resorts to defensive behaviors. He/she tends to defend his/her own opinions, to evaluate the performance and assign meanings to the behaviors and intentions of others in order to stay in control, to maximize his/her chances of winning and to avoid or get rid of negative feelings.

This means that the individual acts in ways that discourage critical inquiry of his/her own opinions and behaviors (by self and others), or testing or rigorous argumentation of his/her statements. Moreover, a defensive reasoning encourages the individual to keep to oneself the assumptions, inferences and conclusions that shape his/her behavior, and makes him/her avoid public testing in an independent, objective way (Argyris, 2000).

Consequently, the individual cuts himself/herself off from the possibility of testing publicly the primary assumptions of his/her original theory-in-use, leading to what Argyris and Schön (1974) call "self-sealing". The only way such individuals can test their own opinions and paradigms is the individual mode, i.e., using a self-referential logic (Argyris, 2000, p. 5); however, such logic makes it impossible to question or alter the governing variables.

It follows that actions generated by model I theories-in-use encourage single-loop learning, while discouraging double-loop learning (up to the point of making it impossible).

They also lead to an individual’s tendency to externalize responsibility for error and transfer it to others and/or to the system (Argyris, 1991; Argyris, 2000).

Thus, actions based on model I theories-in-use create defensive attitudes, self-fulfilling prophecies, with the self-sealing processes leading to an escalation of errors, which would need double-loop learning for resolution. But the individual’s actions reinforce his/her need for unilateral control, to not lose, to avoid negative emotions and seem rational, all these creating loops that help consolidate model I theories-in-use (Argyris, 2000).

**Consequences for learning and effectiveness**

The consequences of action strategies characteristic of model I theories-in-use include, as shown earlier in this section, defensive interpersonal and group relationships, deficient production of valid information and reduced freedom of
choice.

This has negative effects on learning because ideas are rarely tested publicly. Resulting assumptions tend to become self-sealing.

Under these conditions, learning that does occur is confined to the bounds of what is considered acceptable, thus taking the form of single-loop learning. Double-loop learning is unlikely in this context (Argyris, Putnam and McLain Smith, 1985, p. 89).

Anderson (1994) argues why model I theories-in-use is likely to inhibit double-loop learning. Model I is characterized by unilateral control, a tendency toward self-protection and maximizing winnings. In order to achieve this, individuals often resort to distorting facts, putting forth unjustified evaluations, attributions or meanings, using various strategies that avoid “hot” subjects and making face-saving moves.

At the same time, such individuals will not admit either to themselves or to others that they indulge in such attitudes and behaviors. Therefore, they create defensive reasoning and routines that prevent self-discovery of the true theory-in-use underlying their actions. Even if unconsciously, those individuals are not willing to admit to their real motives and intentions, thus being hardly in a position to evaluate them. Since evaluating governing variables (which can be equated with intentions) is characteristic of double-loop learning, model I theories-in-use can be regarded as inhibiting this type of learning.

Argyris, Putnam and McLain Smith (1985) point out that double-loop learning is usually required when an inquiry into governing variables, namely into existing mental paradigms and frameworks, is called for. When in an organization there are topics considered unquestionable it is likely that double-loop learning is needed; if unquestionability is accompanied by covering up for unquestionability then most certainly double-loop learning is required. Persistent errors in learning call for it too. And situations in which participants show signs they feel embarrassed or threatened are indicative of the necessity of double-loop learning.

As we have already noted the theories-in-use of individuals tend to converge on model I theories when they perceive situations as potentially threatening or embarrassing.

It is in such situations that individuals are most inclined to control others and protect themselves. These are situations in which self-protection takes the form of externalizing the responsibility for errors and attributing it to others and/or to the
system.

In other words, precisely the situations in which double-loop learning is probably mostly needed are the ones that produce action strategies corresponding to model I theories-in-use – the kind of strategies that inhibit the very double-loop learning (ibid., p. 89). The result is that inhibiting double-loop learning leads in time to diminished problem-solving capacity and reduced effectiveness.

2.1.1.5. The O-I organizational model, a system with limited learning

Organizations whose employees operate with model I theories-in-use will create behavioral worlds and learning environments consistent with model I (Argyris, 2000).

Argyris and Schön (1978) advanced a model of this behavioral world which is consistent with model I theories-in-use; they named it model O-I ("O" signifies the organization). It is the model of a system with limited learning (Argyris, Putnam and McLain Smith, 1985), in which individuals who operate with model I theories-in-use when faced with difficult and threatening situations create primary inhibiting loops.

Behavioral worlds have a dual nature. First, it is the actions of the individuals who live in them that create them. Secondy, they have an objective existence independent of the actions of any individual (ibid., p. 93). This means that, on the one hand, the theories-in-use that guide all deliberate behaviors also guide the construction of the behavioral world. On the other hand, the behavioral world guides the socialization of individuals who have particular theories-in-use and creates the conditions in which those theories-in-use are effective or ineffective.

Model O-I is characterized by "defensiveness, self-fulfilling prophecies, self-fuelling processes, and escalating error" (Argyris, 1982, p. 8 apud Smith, 2001).

According to this model, when individuals resorting to model I theories-in-use have to deal with difficult and threatening problems, they create so-called "primary inhibiting loops" (Argyris, Putnam and McLain Smith, 1985, p. 93). These loops are called "primary" because they are fueled by the theories-in-use of the participants during face-to-face discussions, especially when those discussions address potentially embarrassing or threatening topics. Such loops trigger defensive and dysfunctional responses and, consequently, they reinforce the conditions that generate the error.

The inability to discuss important topics, ambiguity and lack of clarity of what
is said or implied, are examples of such conditions (Argyris, 2000, p. 60). This creates favorable conditions for unquestionability, self-fulfilling prophecies, self-sealing processes and escalating errors. It should be pointed out that individuals remain unaware of their very responsibility for the conditions that were brought about.

The primary inhibiting loops generate secondary inhibiting loops. The latter refer to behavioral loops that regard the intergroup interactions in the organization (Argyris, 2000, p.65). Examples are (Argyris, Putnam and McLain Smith, 1985, p. 93): "win-lose group dynamics, conformity, polarization between groups, and organizational games of deception".

The secondary inhibiting loops reinforce the primary inhibiting loops, which leads to a self-generating macro-loop comprising the two. While this phenomenon is generative for the inhibiting loops, it inhibits the conditions that would bring about double-loop learning.

Under such circumstances, organizations can correct errors whose remediation does not threaten existing norms. They may also seek to solve problems that cannot be camouflaged (ibid., p. 93).

However, it is highly unlikely that such behavioral worlds will question and change their governing variables, their norms and assumptions since this would call for the undesirable and uncomfortable questioning of the inhibiting loops (Argyris, 2000, p. 71). They are therefore unable to correct errors when this requires questioning and changing the entrenched norms and values, in other words they are incapable of double-loop learning.

Moreover, these worlds “spin out elaborate webs of camouflage, as well as camouflage of the camouflage”, while the individuals who make them up engage in "backup protective activities such as compiling special files 'just in case the boss asks'” (Argyris, Putnam and McLain Smith, 1985, pp. 93-96).

All of the above make interventions and change in these worlds extremely difficult, creating double constraints on individuals who may wish to make changes. On the one hand, those individuals see the errors and the unproductive activities and feel obliged to correct them. On the other hand, publicly raising issues that can be perceived by others as threatening can be labeled as disloyal and they risk being perceived as a threat to the organization.

Furthermore, attempts to change will activate defensive routines and will
further reinforce the theory-in-use. In the words of Argyris and Schön (1996, p.28): "The actions we take to promote productive organizational learning (double-loop learning – note ours) actually inhibit deeper learning". Thus, the organization begins to work against its long-term interest (Smith, 2001), and its long-term effectiveness depends on double-loop learning (Argyris, 2000, p. 78).

2.1.1.6. Model II theories-in-use and the O-II organizational model

To encourage organizational learning it is necessary to create another learning system based on theories-in-use with governing variables radically different from those characterizing model I theories-in-use (Argyris, Putnam and McLain Smith, 1985), presented in section 2.1.1.4 of this book.

The normative perspective of these theories and of the learning system they create is given by the model II theories-in-use (Argyris and Schön, 1974) and, respectively, by the model O-II of organizational learning systems (Argyris and Schön, 1978).

Model II theories-in-use

Model II as an espoused theory is not unfamiliar – most people proclaim it. But as a theory-in-use, however, it is extremely rare (Argyris, Putnam and McLain Smith, 1985, p. 98). This model is described in table 2.1.1.6.1 underneath.

It should be noted that model II is not the opposite, or mirror image, of model I. The variables of the opposite of model I would be: 1) Participation of everyone in defining the purpose; 2) Everyone wins, no one loses; 3) Let feelings be expressed; 4) Suppress the cognitive-rational aspects of actions. In such a case the associated behavioral strategies would include emphasis on inquiry and on minimizing unilateral control (ibid, p. 92).

In the case of the model II theories-in-use, though, action strategies entail sharing control with those who are competent and participate in designing and implementing the action.

Argyris (2000) argues that, in the case of the behavioral strategies generated by model II theories of action, the individual combines advocacy and inquiry. This is different from emphasizing advocacy (as in model I) or inquiry (as in the mirror image of model I). Attributions and evaluations are justified with more or less verifiable data, and the discussion of the different views is stimulated in order to encourage public
testing. This is an effort to:

– shape opinions based on the most complete and valid information,
– build common positions capable of generating the internal commitment of the participants.


<table>
<thead>
<tr>
<th>Governing variables</th>
<th>Action strategies</th>
<th>Consequences for the behavioral world</th>
<th>Consequences for learning</th>
<th>Effectiveness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid information</td>
<td>Design situations or environments where participants can be origins and can experience high personal causation (psychological success, confirmation, essentiality)</td>
<td>Actor experienced as minimally defensive (facilitator, collaborator, choice creator)</td>
<td>Disconformable processes</td>
<td></td>
</tr>
<tr>
<td>Free and informed choice</td>
<td>Tasks are controlled jointly</td>
<td>Minimally defensive interpersonal relationships and group dynamics</td>
<td>Double-loop learning</td>
<td>Increased long-term effectiveness</td>
</tr>
<tr>
<td>Internal commitment to the choice and constant monitoring of its implementation</td>
<td>Protection of self is a joint enterprise and oriented toward growth (speak in directly observable categories, seek to reduce blindness about own inconsistency and incongruity) Bilateral protection of others</td>
<td>Learning-oriented norms (trust, individuality, open confrontation on difficult issues)</td>
<td>Public testing of theories</td>
<td></td>
</tr>
</tbody>
</table>

The consequences of the action strategies consistent with model II reduce the defensiveness of individuals, and the defensiveness in intragroup and intergroup relationships.

The major function of the group becomes that of maximizing each member’s contribution so that, when the synthesis is done, this will incorporate the widest
possible range of relevant opinions.

Model II emphasizes the learning process through which individuals analyze the primary assumptions underlying their opinions and the opinions of others. Through this process they try to test those assumptions publicly in order to prevent the self-sealing process (Argyris, Putnam and McLain Smith, 1985).

According to Argyris (2000, p. 76), each action strategy is evaluated based on the extent to which it helps the involved individuals to:

- generate valid and useful information (including relevant feelings),
- share a problem in ways that lead to productive inquiry,
- solve the problem such that it remains solved,
- and do so without reducing the present level of problem-solving effectiveness.

The O-II organizational model

This model describes the behavioral world created by individuals interacting on the basis of the model II theories-in-use.

According to this model, when individuals following model II theories-in-use have to deal with difficult and threatening problems, they combine advocacy and inquiry, inviting the others to participate in a process of analyzing opinions and feelings – both their own and those of others. This prevents the creation of primary inhibiting loops, which helps further to bring previously unquestionable problems into the open, and test and possibly correct basic assumptions; the self-sealing process is thus stopped.

As a result, dysfunctions of intragroup and intergroup dynamics should decrease, as will the polarization between groups and the intensity of organizational games of deception and of concealment or camouflage of relevant information caused by group interests. In other words, the secondary inhibiting loops will also be reduced, which can lead to the emergence of both single-loop and double-loop learning (Argyris, Putnam and McLain Smith, 1985, p. 102).

Argyris, Putnam and McLain Smith (1985), as well as Argyris (1991) note that, in general, individuals and organizations have very good competences related to single-loop learning, but they lack the necessary abilities when it comes to double-loop learning.

One of the essential practices that encourage the emergence of model O-II behavioral worlds is the dialogue.
2.1.2. Dialogue

The dialogue is identified as an essential practice of the learning organization (Senge, 1990; 2006). The adoption of dialogue as an instrument of organizational learning is based mainly on the theories and conceptual constructs relative to dialogue advanced by the reputable physicist David Bohm and his group.

Bohm, renowned in quantum physics, considers thought to be to a large extent a collective process. He builds his argumentation about dialogue by using the analogy between the common properties of atomic particles (such as the properties of electron clouds) and how the human mind works. By drawing a parallel between electrons and the process of thought he affirms that thought should be seen as a systemic phenomenon that arises from the way people interact and communicate (Bohm, 1965).

Later on Bohm advances the view that the incoherence and fragmentation that are pervasive today in the process of human thought are the cause of the endless crises that affect humanity (Bohm, Factor, Garret, 1991). To better understand this view a comparison between ordinary light and the light produced by a laser, and an analogy with thought in a group are presented hereunder as an excerpt from Bohm's writings.

“Ordinary light is called 'incoherent', which means that it is going in all sorts of directions, and the light waves are not in phase with each other so they don't build up. But a laser produces a very intense beam, which is coherent. The light waves build up strength because they are all going in the same direction. This beam can do all sorts of things that ordinary light cannot. Now, you could say that our ordinary thought in society is incoherent - it is going in all sorts of directions, with thoughts conflicting and cancelling each other out. But if people were to think together in a coherent way, it would have tremendous power. That's the suggestion. If we have a dialogue situation - a group which has sustained dialogue for quite a while in which people get to know each other, and so on - then we might have such a coherent movement of thought, a coherent movement of communication. It would be coherent not only at the level we recognize, but at the tacit level, at the level for which we have only a vague feeling. That would be more important.” (Bohm, 1996, p. 4).

When dialogue happens the participating group members would be "partaking and taking part" in a shared meaning. This would be the equivalent of the birth of a
"collective mind", which does not exclude individuality, though. A member of the group may have a separate opinion, but that opinion would be part of the group and of the shared meaning.

The ideal outcome of dialogue is described by Bohm as "a harmony of the individual and the collective, in which the whole constantly moves toward coherence". The dialogue process entails "both a collective mind and an individual mind, and like a stream, the flow moves between them". Finally, the group might reach "somewhere between all these opinions, and we start to move beyond them in another direction - a tangential direction - into something new and creative" (ibidem, p. 8).

2.1.2.1. Dialogue vs. discussion. The characteristics and purpose of the dialogue.

The promoters of dialogue advocate it as an approach that is antithetical to discussion/debate and coming to counteract the shortcomings of the latter.

In their view, unlike in dialogue, the participants in a discussion/debate present and defend various perspectives/opinions in search of the best way to shape the decision called for at the time. However, the emphasis placed on winning (in this case winning means to have one’s view accepted by the group) implies that the discussion/debate does not always hold coherence and truth to be a priority, and does not allow for reaching a common, holistic perspective (Bohm, 1996; Bohm, Factor, Garrett, 1991; Isaacs, 1999).

Table 2.1.2.1 contrasts the two approaches.

<table>
<thead>
<tr>
<th>DISCUSSION / DEBATE</th>
<th>DIALOGUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Different ideas are presented and defended, and this may provide a useful analysis of the existing situation</td>
<td>Different views are presented, as means/resources to discovering new, different ideas</td>
</tr>
<tr>
<td>In a debate alternative views are evaluated and one gets to be selected</td>
<td>In a dialogue complex issues are explored</td>
</tr>
<tr>
<td>When they are productive, discussions converge on a conclusion or course of action</td>
<td>By its nature dialogue is diverging; it does not seek agreement rather a deep grasp of complex issues</td>
</tr>
</tbody>
</table>

As shown in the table, dialogue does not aim at analyzing things or winning a
controversy. Rather, the holistic perspective that can be brought about by dialogue is the major potential benefit.

By dialogue each individual consciously seeks to "suspend" his/her assumptions in order to watch them with detachment and understand the subjectivity that hides behind them.

Therefore dialogue means listening both to one's own opinions and to those of others; it means to "suspend" them, to understand their meanings. If all members of a group come to understand all opinions, then they relate to a common content, although they may not entirely agree with all the views that are part of that content. A potential major benefit is that participants in the dialogue might realize that individual opinions are not really very important in themselves – they are mere assumptions that are based on "a collection of concepts, memories and reflexes colored by our personal needs, fears, and desires, all of which are limited and distorted by the boundaries of language and the habits of our history, sex and culture" (Bohm, Factor, Garrett, 1991). The group can simply share individual meanings out of which the truth may emerge suddenly and not as a conscious choice of the group (Bohm, 1996).

2.1.2.2. Dialogue in organizations

Dialogue must occur and create in an "empty space", a space where nothing is predetermined, where there is no object, topic or purpose of discussion, no agenda or schedule, where there is no attempt to accomplish anything useful, where no one has to agree to something, no one has to say something or has to not say a certain thing, where everybody simply listens to all opinions and where it might happen that no concrete, tangible results occur (Bohm, 1996, pp. 5-13).

From this perspective, the use of dialogue in organizations can raise many problems and sometimes it is even impossible. A few closing comments are appropriate here.

Firstly, trying to achieve a useful purpose or goal through dialogue will bring utility-driven assumptions in the dialogue "space", which assumptions will limit the dialogue's results (Bohm, 1996, p. 5). Using dialogue in organizations could

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18 "Suspending assumptions" means to consider your own assumptions at the same time with those of others. According to Bohm (1996, p. 6): "That means that it is sort of there in front of you. You are not suppressing it, not carrying it out, not believing it or disbelieving it, you are simply seeing the meaning of your assumptions along with the other person's ".

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nevertheless be of considerable value, as it would allow people to learn about each other’s assumptions, which may improve their communication and collaboration. What is important under these circumstances is not so much the result of the dialogue, but “rather the softening up, the opening up, of the mind, and looking at all the opinions” (ibid., p. 17).

Secondly, most organizations have inherent, predetermined purposes and goals, which are rarely questioned. Those are automatically brought into the space of the intraorganizational dialogue, sometimes without the participants being aware of it. And yet, this obstacle can be removed if participants realize from the very beginning that taking into consideration and questioning them can prove essential to the well-being of the business (Bohm, Factor, Garrett, 1991).

Finally, members of an organization may have already developed, prior to the dialogue, various relationships between them and with the organization. It is likely to be a pre-existing hierarchy. Participants in the dialogue may fear expressing opinions that might be regarded as critical of persons who are higher up in the hierarchy or of norms and customs specific to the organizational culture. They may be reluctant to express certain ideas because of a perceived need to protect a colleague or one’s own group. In the organizational setting, one’s own career or the degree of social acceptance can be perceived as threatened by participation in a process characterized by transparency, openness, honesty and spontaneity (Bohm, Factor, Garrett, 1991). Dialogue is not possible if any of the participants is unwilling to join the dialogue under the condition that hierarchies are temporarily voided and assumptions suspended. Senge (2006) also sees these obstacles as critical to the existence of dialogue in organizations.

However, the enormous creative potential of dialogue in organizations is the great reward in exchange for any transitory suspension of existing organizational structures and relationships (Bohm, Factor, Garrett, 1991).

2.2. The learning organization

2.2.1. An overall view

According to Senge (2006), the fundamental meaning of the concept of "learning organization" is captured in the definition by which the learning organization is "an organization that is continually expanding its capacity to create its future"
(Senge, 2006, p. 14).

The key to building such an organization is, in the author's view, to practice, at a personal and organizational level, five disciplines, which are a collection of practices (what we do, how we do it) and principles (why we do it) that require a continuous study and practice.

They are very different from the familiar disciplines in management (e.g., accounting), meaning that they act at a personal and organizational level, each of them transforming our way of thinking and interacting, our way of learning together. Thus, they develop: the ability of people to have a purpose and build truly shared visions (starting from the awareness of what is important for each as an individual), the ability to have a systems perspective and understand the interdependencies (by what is called systems thinking) and, last but not least, the ability to reflect critically on their own paradigms.

Those five disciplines are a path for continuous personal and organizational development and entail a lifelong commitment for those who want to master them. The learning organization rather than being a destination to reach is a state toward which an organization has to strive continuously (Senge, 2006, p. 10). Viewed this way the "learning organization" is an ideal type of organization, namely a useful fiction that can serve as a reference for comparing the actual developmental state of an organization (Burrell and Morgan, 1979).

In what follows, we will briefly deal with the five disciplines, but not before underlining that it is vital that the five disciplines develop as an ensemble. The path toward the "learning organization" entails a shift in the traditional pattern of thinking: from perceiving just the parts to seeing the whole, from viewing people as mere workers to considering them as active participants in shaping their own reality, from reacting to present events to creating the future through interventions on systems and behaviors (Senge, 2006).

2.2.2. The disciplines of the learning organization

2.2.2.1. Personal mastery

This is the discipline of continually clarifying and deepening one’s personal vision, of focusing and targeting one’s energies, of developing patience and improving one’s ability to see reality objectively. As such, it is the "spiritual
foundation" of the learning organization since an organization's capability and commitment to learn cannot be greater than that of its members. This discipline, together with the discipline of team learning, contributes to the learning organization's capability to appeal to people's inner springs of motivation, to their commitment, to what really matters to them. Therefore, the two disciplines contribute essentially to creating governing variables consistent with model II theories-in-use, and to building organizations according to model O-II (covered in section 2.1.1.6).

The essential practice of this discipline includes the training of the ability to simultaneously manage both a personal vision of the desired future and a clear picture of the current reality. This will generate an inner strength that Senge terms "creative tension". "Tension" has a natural tendency to seek resolution, to relieve stress; therefore the natural resolution of the tension lies in moving reality closer to our vision, to what we want. The discipline of personal mastery teaches us not to lower our expectations, even if our vision seems unattainable, and teaches us, paradoxically, that the content of our vision is not important in itself: "It's not what the vision is, it's what the vision does. There are many stories of people who achieve extraordinary results with extraordinary visions – where the results happen to be different from their original intent" (Senge et al., 1994, p. 195).

Next, personal mastery teaches us to see reality as it is, although this may cause discomfort. Perceiving reality realistically and accurately is one of the most difficult tasks entailed by this discipline, which requires the ability to ask oneself, in good times or hard times: "What is actually going on now? Why is my reality, so difficult?"

Last but not least, the discipline of personal mastery teaches us to develop our ability to choose. Choosing is an act of courage because it shapes the actions and results that will mark our destiny.

2.2.2.2. Mental models

The concept of mental models is an essential factor in the theory of building and developing the learning organization.

The term “mental models” is equivalent to a paradigm – an integrative set of ideas and practices – that defines, influences the way people view and interact with the world.

Mental models can be just generalizations of such ideas and practices, or
they can become complex theories. They shape the way people perceive certain life situations or human relationships, or how people act.

The active side of mental models, which determines the perceptions as well as the decisions and actions of individuals, makes them a central subject of interest in the learning organization. Senge (2006) equates mental models, largely, with the theories-in-use since the discipline of mental models uses to a great extent the concepts, tools and practices of the theory of action.

The main problem with mental models is not whether they are right or wrong – all models are, by definition, simplifications of reality. The thing is they become a potential problem when individuals, managers for example, are unaware of their existence. Since the world changes, the gap between the mental model of reality and the reality itself widens. Being unconscious, mental models remain unexamined and unchanged, getting to no longer reflect reality and leading to wrong conclusions, wrong decisions and counterproductive actions. Therefore, in organization management it is very important to be aware of mental models, to question and change them whenever the surrounding reality demands it (Senge, 2006, pp. 165-167).

Bringing to the surface, questioning, discussing mental models and validating or changing them in tune with the surrounding reality is one of the goals and results of double-loop learning, which leads to the long-term effectiveness of the organization.

Organizations need to develop three qualities in order to be able to work consciously with mental models (Senge, 2006, p. 171):

– A culture that promotes values such as questioning and analyzing one’s own mental models (values that we deem compatible with model II theories-in-use, described in section 2.1.1.6);

– Tools and other means that individuals and teams can use to promote their self-awareness and capability for reflection;

– An organizational framework that institutionalizes the regular practice and, implicitly, the development of skills for working with mental models.

The discipline of mental models – skills and tools

The ability to work with mental models involves tools that develop two major categories of skills: reflection skills and inquiry skills (Senge, 2006, p. 175).
Reflection skills refer to our ability to analyze our own thinking process so as to become more aware of how we form our mental models and how these influence our behavior. This involves the ability to reflect on our thinking while taking action.

Inquiry skills regard the way we act while directly interacting with others, especially in dealing with complex or conflicting issues.

Let us note that the tools for developing these skills should be used not only by individuals but also by groups. We will briefly argue that this is the case.

The individual skill of reflecting on theories-in-use is affected by their tacit, unconscious nature, which was discussed in section 2.1.1.1.

This leads to inconsistencies between our ideas about the action we should undertake and the actual action produced, which can be noticed only by other individuals who observe our actions. As Argyris (2000, p. 4) remarked: "When we are producing the actions, we are unaware of the gaps (between the actions consistent with the espoused theory and the actual actions induced by the theory-in-use – note ours). But when others are producing the actions, we are aware of them and of the fact that they are not. Patterned blindness occurs only when acting."

These skills, together with accompanying tools and methods (specific to the theory of action), which are shown below, constitute the core of the discipline of mental models, according to Senge (2006, p. 176):

- Facing up to the distinction between the espoused theory and the theory-in-use;
- Recognizing the "leaps of abstraction" (perceiving how our mind leaps from observation to generalization)
- Bringing to light the "left-hand column" (articulating what we normally think but do not pronounce)
- Balancing the use of inquiry and advocacy (skills for collaborative, group learning).

The discipline of mental models – agreement and convergence

The objective of the discipline of mental models is not agreement or reaching mental models convergence. In a team or organization there can and should exist different mental models, some of them in disagreement.

The objective of the discipline is to find the model best fit to the particular situation or problem, in order to make the best possible decision (Senge, 2006, p.
In other words, we believe that the discipline of mental models is meant to shape certain theories-in-use with governing variables consistent with model II theories-in-use and, implicitly, to create model O-II organizational learning systems (see section 2.1.1.6).

2.2.2.3. Team learning

Senge (2006) considers the team to be the fundamental unit of collective learning in organizations, due to the alignment and synergy that occurs within, due to the existence of a common goal, of a shared vision and understanding of the way that one member can complement the efforts of another. Team learning is a process of aligning and developing the team’s ability to create the results it truly desires. It is based on the discipline of developing a shared vision, and on personal mastery, which are necessary but not sufficient, because “the world is full of teams of talented individuals who share a vision for a while, yet fail to learn. The great jazz ensemble has talent and a shared vision (even if they don’t discuss it), but what really matters is that the musicians know how to play together” (Senge, 2006, p. 218).

In the team learning model, collective learning is built on two types of discourse: dialogue and discussion.

Dialogue and team learning

In considering the dialogue as an essential practice of team learning, Senge (1990) had in view mainly the theories and concepts about dialogue advanced by the renowned physicist David Bohm and presented earlier in this book (section 2.1.2.).

A dialogue in a group means a free flow of meanings, leading to common, creative perspectives that cannot be obtained individually. For this reason dialogue is one of the fundamental tools for achieving the full potential of collective thinking in the learning organization. As a team learning tool dialogue can prove essential as a facilitator as it can remove the fragmentation caused by subjective perceptions. Dialogue can help attain coherence across the group through the acquisition of meanings and, possibly (and hopefully), by developing new insights, holistic and therefore creative, generative.

Dialogue in a team implies a free, creative exploration of complex and subtle topics. It entails "a deep 'listening' to one another and suspending of one's own
views” (Senge, 2006, p. 220), being “the embrace of different points of view – literally the art of thinking together” (Isaacs in Karagianis, 2001).

Through dialogue the team can explore individual and collective assumptions, ideas, beliefs, and feelings that subtly control their interactions. In a dialogue people become observers of their own thinking, as they gradually validate their own thoughts with the thoughts of others (Senge, 1990, p. 242).

The dialogue offers team members the opportunity to participate in a process that:

– reveals their achievements and failures in communication;
– can unveil models, hitherto confusing, of incoherence\(^\text{19}\) that can lead them, on the one hand, to avoid (sometimes unconsciously) certain topics or, on the other hand, to insist, beyond all reason, on defending personal opinions on other subjects (Garret in Mandl, Hauser and Mandl, 2013);
– is essential for (and interdependent with) the discipline of mental models, because the team is the environment and the dialogue is the instrument, which together constitutes the necessary framework within which the discipline of mental models can be practiced collectively (Senge, 2006).

The discipline of team learning – dialogue and discussion

As we have seen in section 2.1.2.1, dialogue is seen by the promoters of the concept as antithetical to discussion/debate and is meant to counteract the shortcomings of the latter.

Isaacs (1999) notes that discussions often degenerate into fierce debates, where people, instead of seeing themselves as partners in a vital, living relationship, come to think of themselves as "positions" they may agree with or not. They basically fail to distinguish between "holding a position" and "being held by the position" (Senge, 2006, p. 231). Such developments lead to situations and results that people don’t really wish for and bring no benefit to the team: “polarized arguments where people withhold vital information and shut down creative options” (Isaacs, 1999, p. 2).

\(^{19}\) „Incoherence may be indicated by contradictions and confusion, but more basically it is seen by the fact that our thinking is producing consequences that we don’t really want” (Senge, 2006, p. 226).
However, Senge (2006, pp. 200, 222) argues the utility and necessity of both practices (dialogue and discussion) for organizational learning and believes that, in the learning organization, team learning involves the team’s ability to practice discussion/debate and dialogue and shift consciously between the two. Potentially complementary, both types of conversation are essential, especially when used in a synergic manner for developing the team’s capacity to elicit generative learning.

It is worth noting that both dialogue and discussion/debate could lead to new decisions and, implicitly, courses of action. But, while the very purpose of the debate is to make a decision and get to taking action, these are just byproducts of the dialogue, which seeks in particular a deeper understanding of complex problems and gaining new perspectives. Therefore, the team needs to use synergically the two practices in order to develop its creativity and ability to make decisions and act efficiently.

There is an additional reason for the synergic use of the dialogue and debate. By practicing the dialogue, team members develop openness and mutual trust (see section 2.1.2.2). Through dialogue they learn to value the uniqueness and usefulness of each person’s view. By transferring this knowledge into the debate, they get to learn much easier the art of supporting an opinion as opposed to self-identifying with that opinion (this is the distinction made by Senge between “holding a position” and “being held by the position”). The expected result is that, when having to defend a point of view, they will do it less rigidly, in other words, without making "winning" the first priority. This way debates can make a qualitative leap and the chances that they degenerate in the ways mentioned by Isaacs (1999) are diminished.

However, the synergic use is not possible unless team members know and exploit the distinctions between the two conversational types. A team that learns oscillates permanently between dialogue and discussion, although their basic rules, purpose and finality are different. If the team is unable to realize this difference it is likely that neither dialogue nor productive debates can take place (Senge, 2006, pp. 223, 230).

We should also observe that, largely, the skills required both for dialogue and for carrying out a productive rather than a destructive debate are the same as the ones required for practicing the discipline of mental models: inquiry and reflection. And, in Senge’s words, "one of the reasons that dialogue is so important" is that "it
offers a safe environment for honing these skills and for discovering the profound
group learning that they can lead to" (Senge, 2006, p. 231).

So, team learning, built on the art of carrying on a dialogue and a constructive
debate, is important for the discipline of mental models. Yet the converse is also
true: the discipline of mental models is as important for the success of team learning.
This is so because the discipline of team learning involves confronting creatively the
powerful forces that prevent teams from practicing a fruitful dialogue and productive
debates. These (such as the defensive routines) are precisely the phenomena that
two of the tools used by the discipline of mental models, inquiry and reflection, address (Senge, 2006, p. 220).

A final remark is warranted. Senge argues that, in his model of the
organizational learning process, communities of practice (see Wenger and Snyder,
2000 on the topic, which was introduced in 1991 by Lave and Wenger) are
complementary to teams. Karlenzig (1999) writes about Senge’s view: "Communities
of practice are the necessary complement to teams. Knowledge is generated in
teams, but it resides in the communities. Teams are task-oriented and fleeting; they
don’t last. As the teams dissolve, people go off and reform in other teams. But they
keep those networks of relationships, and they maintain those community ties. It was
really about team learning and not very much about organizational learning. It took
all our experience with member companies to recognize that communities are the
place where this knowledge moves into, gets tapped, accessed, diffused and
shared."

2.2.2.4. Shared vision

This is the vision created at the organization’s level, a vision rooted in the
personal visions of the individuals forming the organization.

We can state that without a shared vision, there is no learning organization. According to Senge (2006), without the pull offered by a goal, which people truly want to achieve, the forces in support of the status quo can be overwhelming. Vision establishes a supreme goal. The greatness, the nobility of the goal compels new ways of thinking and acting. A shared vision provides direction for the learning process when obstacles arise. Learning can be difficult, sometimes even painful. But with a shared vision in front of them it is more likely that people are willing to share their way of thinking, to examine their mental models, to recognize their personal and
organizational weaknesses.

Since the shared vision of an organization stems from the personal visions of the people within, organizations should encourage their members to develop their own personal visions, which is one of the roles of the personal mastery discipline. In the absence of one’s own personal vision, all an individual can do is share another person’s vision, which generates acceptance rather than involvement.

Developing a shared vision is the answer to a fundamental question in management: How can commitment to the long term be generated in an organization? In this regard Senge asserts: "It may simply not be possible to convince human beings rationally to take a long-term view. People do not focus on the long term because they have to, but because they want to. In every instance where one finds a long-term view actually operating in human affairs, there is a long term vision at work" (Senge, 2006, p. 196).

2.2.2.5. Systems thinking

Systems thinking, called the fifth discipline, is the conceptual basis of the way learning organizations relate with their environment. At the same time this discipline binds all disciplines of the learning organization in a whole.

The essence of this discipline consists in a change of mental models:
– getting to see around us interdependence and mutual interaction, such as circles of causality, rather than a mere chain of linear cause-effect relationships;
– getting to see processes of change rather than static situations, snapshots.

The practice of systems thinking starts with understanding a simple term: the feedback loop, positive or negative, characteristic of nature. It evolves through the recognition of certain "generic structures", "archetypes" that keep occurring in the surrounding reality (Senge, 2006). Then, systems thinking develops a rich language to describe a vast number of interdependencies and patterns of change. Finally, systems thinking simplifies our lives by helping us see the patterns behind events and details. The systems perspective reveals that there are multiple levels in the understanding of any situation or event, as suggested in figure 2.2.2.5.1 beneath (Kim, 2001).

This model suggests that, like the submerged part of an iceberg, systemic structures are hard to perceive and more important than we expect (Smith, 2013); identifying these structures elicits double-loop learning and generative responses,
Another concept that we consider important for management, in general, and for the subject of this book in particular is the "dynamic complexity" as opposed to "detail complexity". Referring to the two types of complexity Senge (2006) states "... dynamic complexity are situations where cause and effect are subtle, and where the effects over time of interventions are not obvious. Conventional forecasting, planning, and analysis methods are not equipped to deal with dynamic complexity. When the same action has dramatically different effects in the short run and the long, there is dynamic complexity. When an action has one set of consequences locally and a very different set of consequences in another part of the system, there is dynamic complexity [...] The real leverage in most management situations lies in understanding dynamic complexity not detail complexity."

It follows that systems thinking and understanding dynamic complexity offer the potential to generate innovative, long-term, sustainable management solutions.

Oncică-Sanislav and Cândea (2009b) note that the concept of “learning organization” is treated in a multidisciplinary manner in the literature. Although this induces complexity, it brings the advantage of a deeper approach as it sheds light on the multiple facets of the concept.

In what follows, we will further examine the concept of "learning organization"
by presenting several selected theories and models that we consider relevant for the purpose of this book and necessary for a better understanding of the notion.

2.2.3. The learning organization – complementary models

The purpose of our looking at variations of the learning organization model is to gain, in the end, a more complete understanding of the possible relationship between the learning organization and organizational sustainability.

2.2.3.1. The company as a living entity

Although, chronologically, the model proposed by de Geus was published after Senge’s, what prompts us to present this model ahead of others is the decisive influence de Geus's ideas had on Senge’s developing the model of the five disciplines (Senge in de Geus, 2002). We consider that the concept of the “the living company” is fundamental not only for understanding the notion of the “learning organization” and Serge’s model of the five disciplines but also for tackling business sustainability.

In de Geus's view (2002) four characteristics define the living company:

1. Sensitivity to the environment – expresses the ability of a company to learn and adapt, to exist in harmony with its environment;

2. Cohesion and identity – are aspects of a company’s internal ability to build its own community, its own purpose;

3. Tolerance, leading to decentralization – means, in de Geus’s words, to allow “activities to happen in the margins” without exerting excessive “central control over moves to diversify”, which helps build constructive relationships inside or outside the organization’s boundaries;

4. Conservatism in financing – implies frugality and not risking capital in an unwarranted manner, which is key for managing growth and development efficiently.

De Geus's belief that: “like all organisms, the living company exists primarily for its own survival and improvement, to fulfill its potential and to become as great as it can be” (de Geus, 2002, p. 11) is fundamental to his vision of organizations. As a consequence, he sees the above four characteristics as the necessary conditions for the long-term survival and evolution of a company.

It is important to note that de Geus's model makes a necessary addition to other models of the learning organization, by considering the financing aspect of
company growth, which is very important for long-term survival. De Geus (2002, p. 174) holds that: “when companies know how to 'listen' to their financing they are ready to follow the path of a natural, long-lived evolution”. Companies that survived and progressed over long periods of time “know that having money in hand means that they have the flexibility and independence of action” and “conservatism in financing helps them to avoid the temptation of gambling”, which motivates them not to take great risks in the hope of quick, short-lived gains.

The author thinks that by bearing in mind the four characteristics of the living company, business leaders will question the very nature and definition of what success in business means, along with the role of companies in human communities; he desires that this process elicit essential changes in managers’ behavior. Such changes hinge on changes in the underlying values and principles, which should be quite different from those promoted by modern business schools.

In table 2.2.3.1 shown further down, where “the organization as a machine” is contrasted with “the organization as a living entity”, we contrast two different perspectives on organizations, which highlight very well the differences in values, principles and assumptions about management and organizations that de Geus refers to.

In the context of exploring the strategic relevance of the “learning organization” concept for business sustainability, we consider it important to bring in Wheatley’s (1992, 1999) contribution, to complement de Geus’s model. Wheatley introduced a new paradigm for organizational development, which relies on the “reintegration of society” (Cors, 2003, p. 7), through which leaders promote the participation of all-size communities – from groups to organizations and states – to the effort of working together in perfect harmony.

In the author’s opinion: “Our ideas and sensibilities about change come from the world of Newton. We treat a problematic organization as if it was a machine that had broken down. We use reductionism to diagnose the problem...to repair the organization, all we need to do is replace the faulty part – [a bad manager, a dysfunctional team, a poor business unit] – and gear back up to operate at a predetermined performance level ... But when we encounter life's processes for change, we enter a new world. We move from billiard balls banging into one another to effect change, to networks that change because of information they find meaningful. We stop dealing with mass and work with energy. We discard
mechanistic practices, and learn from the behavior of living systems. New change dynamics become evident ... The first great shift (in our paradigms – note ours) is [that we] need to work with the whole of a system ... [The second shift is to] leave behind the imaginary organization design and work with the real organization, which will always be a dense network of interdependent relationships ... If we are interested in effecting change, it is crucial to remember that we are working with these webs of relations, not with machines” (Wheatley, 1999 apud Cors, 2003).

Table 2.2.3.1. Corporate money machines vs. the living company. Summarized from de Geus (2002)

<table>
<thead>
<tr>
<th>THE ORGANIZATION AS A MACHINE</th>
<th>THE ORGANIZATION AS A LIVING ENTITY (AN OPEN SYSTEM)</th>
</tr>
</thead>
<tbody>
<tr>
<td>It exists only for the purpose of its design: in this case to generate money for its owners.</td>
<td>It has its inherent purpose, a design of its own, which cannot be replaced by somebody else’s aims, although the latter may be a response of the former. What happens with the energy of a being that cannot fulfill its destiny?</td>
</tr>
<tr>
<td>In order to be effective a machine must be controllable by the operators: this is the raison d'être of management – to control the organization.</td>
<td>Living systems cannot be controlled in the same way as machines. They are receptive, but only through interactive complex processes that will equally change those who are influenced and those who exert influence.</td>
</tr>
<tr>
<td>A machine is created by an external party; this is how people perceive corporate systems and procedures: as something that management creates and imposes on the rest of the organization.</td>
<td>If we regard the organization as a living entity, it means that it develops its own processes, just as the human body produces its own cells, which then form their own organs and systems. Doesn’t that happen, in fact, with the informal systems of organizations? Individuals create their own relationship networks and communication channels that are essential for completion of their tasks.</td>
</tr>
<tr>
<td>The organization as a machine implies that it is static; it won’t change unless someone changes it.</td>
<td>A living entity evolves naturally.</td>
</tr>
<tr>
<td>The organization as a machine – its actions are simple reactions to the objectives and decisions of the management.</td>
<td>The organization as a living entity – the organization can set its own targets and has the capacity to operate on its own.</td>
</tr>
<tr>
<td>If the organization is a machine, it will eventually break down unless management rebuilds it.</td>
<td>The organization as a living entity is able to regenerate; it can have continuity beyond its current membership.</td>
</tr>
<tr>
<td>The organization as a machine – implies that its members are employees or, even worse, mere human resources waiting to be put to use.</td>
<td>The organization as a living entity involves human work communities.</td>
</tr>
<tr>
<td>If the organization is a machine, it means that its only sense of identity is the one defined by its builders.</td>
<td>If we perceive the organization as a living entity, it means that it has its own sense of identity.</td>
</tr>
<tr>
<td>If the organization is a machine, it means that its learning is only a sum of its members’ learning.</td>
<td>A living entity can learn as an entity (as a troupe of actors or a jazz band learn).</td>
</tr>
</tbody>
</table>
Using a spider's web as a metaphor, Wheatley demonstrates how organizations are living entities and that learning and change strengthen their structure and their communities.

The basic ideas advanced by Wheatley, according to which individuals and organizations must develop a new paradigm about organization, leadership and change are: “1) Everything is a constant process of discovery and creating; 2) Life uses messes to get well-ordered solutions; 3) Life is intent on finding what works, not what is right; 4) Life creates more possibilities as it engages with opportunities; 5) Life is attracted to order; 6) Life organizes around identity; 7) Everything participates in the creation and evolution of its neighbors.” (Wheatley, 1999 apud Cors, 2003).

The models discussed above underline the systemic dimension of the organization, seen as an open system. The organization has its own inherent purpose, its own destiny, as it tries to continually expand its capability to create its future through learning. This capability is closely related to the environment in which it operates, and the organization has to take into account the close interdependence relationships with its environment.

2.2.3.2. The model of the three building blocks

In his article of 1993, Garvin considers that the existing definitions of the learning organization bereave the concept of three essential elements, crucial for its effective implementation: meaning, management and measurement. He defines the learning organization as “an organization skilled at creating, acquiring, and transferring knowledge, and at modifying its behavior to reflect new knowledge and insights”. Garvin views the last characteristic as very important because, without the practical implementation of what has been learned, there is only a potential for improvement rather than an actual improvement. In addition to the above-mentioned shortcomings, he considers the existing models idealistic, difficult to implement and addressing senior managers rather than managers of the departments where the critical organizational work is actually done (Garin, Edmondson and Gino, 2008).

Initially, in 1993, Garvin proposed a model with five components, which are

20 “Identity is the filter that every organism and system uses to make sense of the world. New information, new relationships, changing environments – all are interpreted through a sense of self. This tendency toward self-creation is so strong that it creates a seeming paradox. An organism will change to maintain its identity.” Wheatley, Kelner- Rogers (1996).
outlined below:\footnote{The description of the five components follows closely Garvin’s (1993) conceptualization.}

1. Systematic problem solving – is based on the philosophy and methods of the quality movement: relying on scientific methods, rather than on guess-work, for diagnosing problems (using the PDCA cycle, for example\footnote{PDCA (plan-do-check-act) is an iterative management method, composed of four steps and used in management for the continuous control and improvement of processes and products. Walter Stewart mentioned this cycle for the first time in 1939, in his book “Statistical method from the viewpoint of quality control”.}), insisting on data, rather than assumptions, as a background for decision making (“fact-based management”), and using simple statistical tools (such as histograms, Pareto's curve etc.) for organizing data and for analysis.

2. Experimentation – involves the systematic search for and testing of new hypotheses; unlike systematic problem solving, experimentation is not a response to difficulties and problems arising from the current activity, rather a conscious exploration and trial of new horizons.

3. Learning from past experience – is a component that “enables companies to recognize the value of productive failure as contrasted with unproductive success. A productive failure is one that leads to insight, understanding, and thus an addition to the commonly held wisdom of the organization. An unproductive success occurs when something goes well, but nobody knows how or why”.

4. Learning from others – is defined as the inquiry and learning process by looking at the way work gets done in other organizations; it ensures the discovery, analysis, adoption and implementation of the best industry practices by benchmarking. Talking with customers is another way to obtain an outside perspective.

5. Transferring knowledge – in order for learning to occur at the organizational level, knowledge must be disseminated efficiently and effectively widely in the organization.

We have detailed the five components above because, in our view, they constitute the core of the model, the model’s distinctive quality, and they also show that the framework is applicable at any organizational level. A model of the learning organization published subsequently, “the model of the three building blocks”, adds two elements/blocks to the earlier model: a supportive learning environment and
leadership behavior. The previous five components contribute to a third block called “concrete learning processes and practices” (Garvin, Edmondson and Gino, 2008).

Table 2.2.3.2 presents synthetically the three building blocks of the model, together with their sub-components and characteristics.

Table 2.2.3.2. The model of the three building blocks of the learning organization. Summarized from Garvin, Edmondson and Gino (2008)

<table>
<thead>
<tr>
<th>Building Blocks</th>
<th>Sub-components</th>
<th>Distinguishing characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supportive learning environment</td>
<td>Psychological safety</td>
<td>Employees:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Feel safe disagreeing with others, asking naive questions, owning up to mistakes, and presenting minority viewpoints</td>
</tr>
<tr>
<td></td>
<td>Appreciation of differences</td>
<td>• Recognize the values of opposing ideas</td>
</tr>
<tr>
<td></td>
<td>Openness to new ideas</td>
<td>• Take risks and explore the unknown</td>
</tr>
<tr>
<td></td>
<td>Time for reflection</td>
<td>• Take time to review organizational processes</td>
</tr>
<tr>
<td></td>
<td>Information collection</td>
<td>A team or company has formal processes for:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Generating, collecting, interpreting, and disseminating information</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Experimenting with new offerings</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Gathering intelligence on competitors, customers, and technological trends</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Identifying and solving problems</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Developing employees’ skills</td>
</tr>
<tr>
<td>Concrete learning processes and practices</td>
<td>Experimentation</td>
<td>The organization’s leaders:</td>
</tr>
<tr>
<td></td>
<td>Analysis</td>
<td>• Demonstrate willingness to entertain alternative viewpoints</td>
</tr>
<tr>
<td></td>
<td>Education and training</td>
<td>• Signal the importance of spending time on problem identification, knowledge transfer, and reflection</td>
</tr>
<tr>
<td></td>
<td>Information transfer</td>
<td>• Engage in active questioning and listening</td>
</tr>
<tr>
<td>Leadership that reinforces learning</td>
<td>Reinforcing learning through leadership</td>
<td></td>
</tr>
</tbody>
</table>

By surveying organizations with an online diagnostic tool based on the above model, the authors identified several principles that can guide managers who endeavor to develop learning organizations:

– **Leadership alone is not enough** – other concrete, unambiguous, well-directed actions are required in order to promote the creation of a proper environment for learning and the implementation of formal processes.

– **Learning is multidimensional** – this highlights, on the one hand, the complexity of the problem and, on the other hand, it reveals that there are many
ways in which the development of the learning organization can be improved, managed, influenced.

- **Organizations are not monolithic** – there are differences among groups, departments and other organizational units in terms of processes and cultures of learning. Therefore, managers should be aware that no “one-size-fits-all” approach could be used across an organization.

- **Comparative performance is the critical scorecard** – obtaining a high score with the diagnostic tool in a certain domain of learning does not necessarily make that domain into a strength that leads to competitive advantage. Overall comparisons with competitors in terms of the multi-dimensional learning processes are relevant.

The model proposed by Garvin, Edmonson and Gino (2008) has the advantage of being simple. Another advantage is that it is applicable at the level of smaller social units of an organization, which are regarded as nodes of the organizational network. However, we have to note that, when compared with other models of the learning organization, this model puts very little emphasis on aspects that are essential for business sustainability, such as shared vision and systems thinking (which might intervene implicit in the model through the leadership block).

### 2.2.3.3 The model of the seven dimensions

Gephart, Marsick and Van Buren (1997), and Marsick and Watkins (1998) undertook research with the objective of identifying the essential common features of existing models of the learning organization. They concluded that the learning organization concept is founded on the following traits:²³

1. Continuous learning at the systems level – employees are expected to learn frequently and share their learning in ways that enable larger systems to learn; this involves three levels of learning: individual, team and organization;

2. Knowledge generation and sharing – employees are encouraged to think collaboratively in new ways in order to identify new assumptions and to make innovations; collaborative thinking occurs through open dialogue about their work; double-loop generative thinking, as defined in section 2.1.1.3, is promoted; systems and processes are designed so as to capture and spread the acquired knowledge across the entire organization;

3. Systems thinking capacity – employees are asked to think systemically in

²³ The traits are rendered very close to the quoted authors’ formulations.
order to become aware of the impact of their decisions and actions within and upon the organization as a whole, at a certain moment and over time;

4. Greater participation and accountability by a larger percentage of employees – people are expected to participate more in organizing work and making decisions; they should assume responsibilities for learning and achieving performance in their work.

5. Culture and structure of rapid communication and learning – structure and culture allow flexibility and open communication; people are counted on to take calculated risks, experiment, learn from their mistakes and share information across the functional boundaries of the organization.

The learning organization should capture, share and use knowledge so that its members can work together to change the way the organization responds to challenges. People should question old ways of thinking. Learning should take place and be supported in teams and larger groups, in which individuals can generate together new knowledge. The learning process should be continuous because becoming a learning organization is a never-ending journey (Watkins and Marsick, 1993).

Watkins and Marsick (1993), and Marsick and Watkins (1999) delineated “seven action imperatives – activities people need to be involved in – that characterize companies that are becoming learning organizations”, which are: 1) Create continuous learning opportunities; 2) Promote inquiry and dialogue; 3) Encourage collaboration and team learning; 4) Establish systems to capture and share learning; 5) Empower people toward a collective vision; 6) Provide leadership for learning; 7) Connect the organization to its environment.

Gephart, Marsick and Van Buren (1997) developed The Learning Organization Assessment Framework (LOAF), which identifies three organizational levels of learning: individual, team, and organization. Teams and organizations are able to learn to the extent they have in place mechanisms that allow them to combine and integrate the knowledge acquired at the level of individual members (Watson and Marsick, 1993).

What we call the model of the seven dimensions is shown in figure 2.2.3.3.1; it brings together the action imperatives with the organizational learning levels and the factors that support learning.
In our opinion, this model comes very close to Senge's model (1990, 2006) as it reflects, even if worded differently, the five dimensions of the “learning organization”.

### 2.2.3.4. The knowledge creating company

When markets are volatile, with the number of new technologies growing rapidly, competitors multiplying as quickly, and products becoming outdated overnight, success belongs only to the companies able to create knowledge continuously, to spread it across the organization and to transfer it fast into applied technologies and products (Torokoff, 2008).

In order to accomplish this, the learning organization has to apply an iterative

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24 Another source is the figure posted by Kai R. Larsen at http://leeds-faculty.colorado.edu/larsenk/learnorg/watkins.html [Accessed 10 October, 2000]
and interactive learning process, following the “knowledge spiral” (Nonaka and Takeuchi, 1995); this process is represented in figure 2.2.3.4.1.

In order to understand the knowledge spiral it is useful to clarify two basic notions upon which the concept is built: tacit knowledge and explicit knowledge.

While tacit knowledge is what people know implicitly, deep inside their own selves, and suggests that “we know more than we can tell”, explicit knowledge refers to the formalized, conscious knowledge. In the words of Michael Polanyi, who first introduced the notion of tacit knowledge: “Tacit knowledge is personal, context-specific and therefore hard to formalize and communicate. Explicit or ‘codified’ knowledge, on the other hand, refers to knowledge that is transmittable in formal, systematic language.” (Polanyi, 1966 apud Mintzberg, Ahlstrand and Lampel, 1998).

The knowledge spiral is based on the bidirectional conversion between the two types of knowledge in a social unit, which takes place in four modes (Mintzberg, Ahlstrand and Lampel, 1998):

1. Socialization (tacit to tacit): the development and implicit sharing of tacit
knowledge, often even without the use of language – for example, through direct experience such as spending time together.

2. *Externalization* (tacit to explicit): converting tacit into explicit knowledge, mostly through elicitation and documentation – for example, presenting concepts, showing images, or producing written documents supports this sort of conversion.

3. *Combination* (explicit to explicit): combining different types of explicit knowledge to form new knowledge, by organizing and integrating knowledge existing in documents, databases or other repositories, within or outside the organization. The new explicit knowledge is then distributed in the organization.

4. *Internalization* (explicit to tacit): refers to the conversion of explicit knowledge back into the tacit form, as people internalize knowledge through practice (“learning by doing”). Learning takes place both in mind and body since knowledge implies significations and sentiments, i.e., gets embodied both at the cognitive and emotional levels. Explicit knowledge becomes, thus, part of the organization’s individual members’ knowledge and adds to the organization’s assets.

The key of the learning process is, as we have already mentioned, the progression in the knowledge spiral, which crosses the four conversion modes. The progression takes place while moving through a complete loop of the spiral and can be described as follows: “Through Socialization, tacit knowledge is created through sharing of experiences, mental models, and skills. Knowledge is then drawn out and made explicit so that ideas can be built into archetypes, and tested through new product development. New ideas are explicitly shared throughout the organization, across levels and other boundaries, so that they can be externalized and experimented with in other parts of the company. Finally, the newly evolved ideas are again internalized so that they become re-socialized.” (Marsick, Bitterman and van der Veen, 2000).

We should point out that this model emphasizes the creation and management of tacit knowledge, which Nonaka and Takeuchi (1995) consider a strategic process. According to these authors, the essence of a knowledge strategy in an organization is to develop the necessary abilities to acquire, create, garner and exploit knowledge. Since only individuals create knowledge, the role of the organization is to facilitate learning by supporting and stimulating individual learning, by catalyzing it, by crystallizing and synthesizing what is learned at the group level through dialogue, discussions, sharing of knowledge and observation.
We also deem appropriate to examine some of the differences and similarities between two areas: on the one hand, the domain of “knowledge creation”/“organizational learning” and “learning organization” and, on the other hand, the domain of “knowledge management”.

Thus, Sun and Scott (2003) note that the approaches to knowledge management focus on managing explicit knowledge, which is just one aspect of the process of knowledge creation according to Nonaka and Takeuchi. Collins (2001) and Von Krogh, Ichijo and Nonaka (2000) highlight the emphasis on control, information technology and measurement systems prevailing in the theories of knowledge management. Senge, too, states in Karlenzig (1999): “To me the first wave of knowledge management hasn't been about knowledge at all. It's been about information – how to capture it, store it, retrieve it, access it and all that stuff. All those verbs work great for information, but none of them actually work very well for knowledge ... [being] an important difference between knowing about something, which is information, and truly having knowledge”. However, he sees similarities between the two areas since the “second wave of knowledge management ... addresses some of the same critical issues (as the learning organization concept – note ours) ... the sustainable creation, transfer and dissipation of organizational knowledge” (Karlenzig, 1999).

By comparing the two areas (knowledge creation and knowledge management), Leuci (2005) concludes that, unlike knowledge management, knowledge generation embodies a set of practices and activities that include facilitating the interaction and conversation between individuals, or sharing knowledge in a group or organization, based on understanding how people can be encouraged to be creative.

2.2.3.5. The model of the two elements

According to Smith (1993), the learning organization is a social system whose members have learned to consciously develop processes, so that they continuously:

– generate, retain and improve individual learning so as to improve the performance of the system in ways relevant to all stakeholders;

– monitor and improve system performance; adapting to change and surviving in the long run are part of how performance is defined.
The learning organization develops “dynamic capabilities”, namely the organizational ability to learn, adapt, change and renew itself over time, by searching for, finding and solving problems – at the organizational level. Those dynamic capabilities are exercised in the tension created between the organization’s need for continuity, on the one hand, and the need for change over time (brought about by the changing environment in which the company operates), on the other hand.

The model proposed for the implementation of the learning organization concept according to the aforementioned guidelines consists of two elements (hence the title of this section): collaborative learning, as a form of “action learning” [as described by Pedler, Burgoyne and Boydell (1991) and represented in figure 2.2.3.5.1], and a performance framework consisting of three factors (represented in figure 2.2.3.5.2 as three circles in a Venn diagram).

Figure 2.2.3.5.1 indicates that the learning strategy is based on a Deming-like learning cycle. The results of learning (knowledge and catalysts) are transferred at group, team, or organization level by means of collaborative learning (Smith, 1999).

Figure 2.2.3.5.2 shows that the performance factors apply equally at the individual, group/team and organization levels, which appear as three overlapping planes. Briefly, the three performance factors are:

1. **Focus** – refers to a clear sense of direction and vision, and can be compared, in our view, to the force of the strategic intent (Hamel and Prahalad, 1989) or of the shared vision (Senge, 1990); it is rooted in the shared mental models of the top management team and in the shared vision of the entire organization.

2. **Will** – refers to the attitudes and feelings of the organization’s members, consistent with “Focus”. “Will” needs self-confidence, which Senge (1990) calls the ability of personal mastery, and a shared vision.

3. **Resources** – this factor considers two aspects. First, resources account for organizational attributes that are, in our opinion, equivalent to core competencies, as defined by Prahalad and Hamel (1990), or to strategic capabilities, as specified by Stalk, Evans and Shulman (1992). Secondly, resources extend beyond competencies and imply the ability or freedom to take certain actions in order to align the organization with the interests of various stakeholders who pressure it.
Figure 2.2.3.5.1. The cycle of collaborative learning. Source: Smith (1999)

Figure 2.2.3.5.2. The performance framework. Source: Smith (1999)
Figure 2.2.3.5.2 implies that the results of learning “shift” the three circles of the Venn diagram (the possibility to shift being symbolized by the bidirectional arrows), and thus determine the extent of the overlap. The more the three performance factors are in harmony (which shows as a more extensive overlap), the better the individual, group and organization performance is.

This last model differs from the other complementary models (with the possible exception of de Geus’s “The company as a living entity” model) because it includes, through the “Resources” factor, the impact the external context can make on the characteristics and performance of the learning organization; thus, this model’s approach borders the field of strategic management. As far as de Geus’s model is concerned, we interpret that its “Tolerance, leading to decentralization” dimension makes reference to the external environment.

2.3. Conclusion

The learning organization is a conceptual framework describing an organization that, through learning, adapts, transforms itself and evolves in response to the aspirations and needs of the people inside and outside the company, in order to obtain superior performances in a competitive and global economy, characterized by complexity and quick changes.

The process of single-loop learning is considered necessary in any organization for its survival, at least in the short term (Hawkins, 1994 apud Örtemblad, 2001).

Double-loop learning implies that individuals (and implicitly the organizations whose members they are) have to become aware of information, possibly even dangerous or embarrassing, that can bring about really significant changes, so that they become capable of analyzing and assuming responsibility for their own behaviors, for action or inaction. This type of learning is considered radical as it implies that the learner questions and even discards knowledge and paradigms that prove outdated.

In our opinion, although both types of learning are important for a learning organization, it is the double-loop learning that proves essential, distinctive for this type of organization, because it ensures not only that the organization adapts to its environment, but that it also adopts a proactive attitude of creating its own future.
We, therefore, consider the existence of generative learning a necessary condition for a learning organization.

We believe that the double-loop learning is also essential for business sustainability. In order to put the company on a sustainable path it is necessary to change the governing variables that rule the way the boundaries of the system called organization are drawn, to change the way the business and its responsibilities are designed, and how the organization assumes the effects of its own actions. As we have already argued in sections 1.4.1 and 1.4.2, companies that strive for sustainability need transformative changes (including in governing variables), particularly when aiming at the higher stages of the process (see figure 1.4.2.1). We believe that the leap from one stage to the next is conditional on the existence of double-loop generative learning.

The organizations that stall at stages 1 and 2 of the evolutionary process appear to correspond to model O-I organizations (see section 2.1.1.5), with a limited learning system, characterized by single-loop learning.

The governing variables of this organizational model imply primary action strategies aimed at controlling the environment and the tasks unilaterally, and protecting oneself and others unilaterally (as shown in section 2.1.1.4). As a result, the basic action strategy is to control others in a unilateral manner, which makes it less likely to integrate the stakeholders’ perspective in the organization strategy. The actions generated by the model I theories-in-use encourage single-loop learning and discourage double-loop learning (to the point of rendering it impossible). They also lead to the tendency for individuals and their organizations to put the blame for errors on others and/or the system.

It is very unlikely that such organizations question and modify their governing variables, norms and assumptions because this would entail an undesirable and uncomfortable inquiry into the inhibiting loops; if undertaken, such a questioning would bring about the very changes needed to leap from stage 2 to 3 and then on to stages 4 and 5 of the evolution toward sustainability (model in figure 1.4.2.1). In its absence, these organizations are unable to correct errors and end up stalling at stages 1 and 2.

The disciplines of the learning organization seem to be necessary for the progression toward sustainability and for moving to model O-II organizations (see section 2.1.1.6), where double-loop learning can take place, the individual and
organizational defensiveness decrease, and solicitude for stakeholders stands better chances to become established and accepted.

Cândea (2007) asserts that the disciplines of systems thinking and mental models increase the learning organization’s prospects for becoming sustainable by stimulating it to question the “traditional” management thinking limited to customers and competition, and by gaining a greater awareness of belonging to a wider system of interdependent stakeholders.

The next chapter of this book will pursue and develop at length the above-mentioned relationship between the dimensions of the learning organization and business sustainability; the hypothesis and the methodology of our research will also be presented.
3. THE LEARNING ORGANIZATION AND SUSTAINABILITY – A RESEARCH PROBLEM

3.1. Introduction

As defined in Chapter 1, a sustainable business is a business that is prosperous in the long run, which makes it able to provide its shareholders, for an indefinitely long time, with a fair return on the invested capital. In order to approach this ideal, the company should strive to develop a strategy that integrates business objectives with consideration for the needs of a wide range of stakeholders, selected on relevance criteria. This way, the strategy of a sustainable business will eventually include objectives that concern all three pillars of sustainable development: economic, social and environmental.

Along these lines, a sustainable business appears to be supported by a strategic response to the ever-changing circumstances of its operating environment. Those changes pressure companies to fundamentally rethink their strategy in line with the complex operating conditions. The companies that are able to build proactive strategies that treat relevant stakeholders’ concerns and requirements as an indissoluble part of the corporate strategy will manage to differentiate themselves from competitors, thereby increasing their prospects for sustainability.

Business sustainability can be seen as a continuous process of transformation, of learning, of organizational becoming. In Chapter 1, section 1.4.2, we developed, based on the concepts covered in the literature, a model that consists of five stages in the evolution of integrating sustainability desiderata in the strategy and values of an organization (figure 1.4.2.1). As discussed in the aforementioned section, the model reveals the progressive stages in which contemporary enterprises may find themselves in terms of their commitment to becoming sustainable.

The fundamental question that we asked ourselves from the very outset of our research was: what are the characteristics of the organization that considers it "natural" to strive for sustainability, namely to include in its strategy not only the objectives that the rigors of competition impose, but also concerns for the relevant stakeholders from the social and natural environments? More precisely, we intended to discover the internal features that would stimulate a company into pursuing a road to sustainability as part of its usual business conduct.
For this purpose, we will explore the extent to which the learning organization, through the features it develops during its becoming, can be part of the answer.

The main hypothesis of our research is that the learning organization paradigm has the potential to define the internal characteristics of an enterprise that holds superior prospects for sustainability (Cândea, 2007a).

The learning organization, as shown by Oncică-Sanislav, Cândea and Cândea (2006), has been treated extensively in the literature with a focus on the usefulness of the concept for change management. But, as revealed by our literature search, there has been relatively little research done on how the learning organization addresses strategic management, a fact mentioned also by Mintzberg, Ahlstrand and Lampel (1998).

We propose to analyze in what follows how the characteristics of the “learning organization” influence, determine and support the formation of strategy and, particularly, of the business sustainability strategy.

### 3.2. Our hypothesis revisited

We will set out to discuss the relationship between the learning organization and business sustainability by addressing the evolution of a company toward sustainability in the light of systems thinking.

According to sections 1.4.1 and 1.4.2 it is likely that, once the leap from stage 2 to stage 3 over the course of the evolution of a company toward sustainability (see figure 1.4.2.1) occurs, the company’s acquired knowledge will promote a self-generating loop toward sustainability (the virtuous cycle in figure 1.4.1.3).

In figure 3.2.1 below we illustrate, by using a "Limits to growth" generic structure (Senge, 2006, p. 390, Smith 2003, p. 112), what can happen at any of the evolutionary stages of the process in figure 1.4.2.1.

Briefly, the “Limits to growth” structure underlies the phenomena that take place in a system going through growth or other kind of evolution. For a while the process is self-generating, giving rise to a virtuous cycle, which results in accelerated growth/evolution (loop “1”). Growth then starts to slow down (most often inexplicably to the participants in the system), possibly coming to a standstill. The virtuous cycle can even get reversed, thus turning into a vicious cycle, which leads to a quick decline, or even collapse of the system. This happens because a balancing process
emerges (balancing loop "2"), triggered by the system approaching certain internal limits that stem from a variety of limiting factors (which restrain the evolution in the desired direction).

The generic structure in figure 3.2.1 can explain what happens in companies that stall in one of the low level stages en route to sustainability (see the process in figure 1.4.2.1).

For example, in the case of a company at stage 1, with a non-compliance attitude toward sustainability but with a good financial situation, the generic question managers are likely to ask relative to sustainability is: "Why bother with matters that do not concern us/do not affect us/are externalities, as long as the company is doing well?". Such a question is a symptom of the emergence of a structure of the aforementioned type. Two aspects are to be noted here.

On the one hand, the working of the generic structure says that the lack of action on the part of company management, which in our case would translate into the company being kept too long at the Non-Compliance (or even Compliance) stage, could lead to a reversal of the self-generating virtuous cycle. In this case, the self-generating process ends up operating against company sustainability, causing the business to stagnate, contract or even disappear.
On the other hand, if managerial action is taken when the “Limits to growth” occur, the managerial principle to observe is: “Don’t push on the reinforcing (growth) process, remove (or weaken) the source of limitation” (Senge, 2006, p. 391). This principle, which is to be applied to the organization as an open system, is derived from the general systems principle: “The harder you push, the harder the system pushes back” (Senge, 2006, p. 58). If these principles are disregarded when working under the pressure of forces external to the organization, there is a risk of inducing the negative reinforcing loops described in figure 1.4.1.2, which would result in strong opposition to or high costs of moving to the next higher level of sustainability. The opposition and costs would make it harder for the company to extricate itself from and remaining stuck in the lower level stages of the evolution toward sustainability.

Being proactive by incorporating social and environmental considerations in the organization’s strategy is the ideal way of mitigating or avoiding external pressures and, consequently, reducing the internal opposition and high costs. For this to happen the limiting factors have to be addressed.

As we have discussed in section 1.5 of this book, the way companies address sustainability depends on their long vs. short-term orientation, on their capability to realize and operationalize the relationship between the socially responsible behavior and the long-term prosperity, and on their ability to incorporate societal concerns into business strategies and policies. To the extent that these capabilities, which we consider essential for advancing toward sustainability, are not being mastered they become limiting factors. Besides, in section 1.5 we have touched also upon other limiting factors, internal and external, that affect a company’s ability to develop and implement sustainability strategies.

This line of reasoning leads us to conclude that, if we were able to demonstrate that the dimensions of the learning organization act toward preventing the occurrence of or mitigating the above-mentioned limiting factors (shown in figure 3.2.1), we could then consider that being a learning organization is a strategic characteristic of a sustainable business. Hence, the dimensions of the learning organization can be regarded as the core, fundamental competencies that underlie the ability of companies to increase their sustainability prospects and, implicitly, their long-term prosperity.
Similarly, given the critical role of the learning flywheel (see figure 1.4.1.4) for a business’s progression toward the higher stages of sustainability (as discussed in section 1.4.2), the characteristics of the learning organization could be considered strategic if they proved necessary for moving an organization toward the stages that require a transformative, radical organizational change.

At this point we can mention two sub-hypotheses of our fundamental hypothesis:

**Secondary hypothesis 1**: The disciplines of the learning organization, when learned and practiced, shape and bolster up the long-term orientation of an organization and its ability to develop good, robust strategies for sustainability.

**Secondary hypothesis 2**: The disciplines of the learning organization are critical for an organization’s progression through the evolutionary stages toward sustainability.

In order to answer the fundamental question of our research, we will advance a theoretical line of reasoning on how the disciplines of the learning organization influence and support: 1) the long-term orientation of an organization and its ability to adopt a systems perspective, and 2) an organization’s capability to set a course toward sustainability.

### 3.3. Reconciling the long term with the short term

In order to obtain long-term performance, a company should be able to simultaneously manage two essential and apparently conflicting undertakings: following short-term objectives without losing sight of or deviating from its long-term route. In this regard, Senge et al., (2008) state: “leaders want to learn how to ride the wave of sustainability innovation into the future while still maintaining a healthy and viable business in the present” (p. 119). Michael Porter of Harvard University points out as well: “Every bit of pressure is pulling companies to doing whatever is necessary to survive …What we’ve found over and over again is that to survive you actually have to have the capacity to integrate the short term and the long term, and think about the two together. And you can’t take actions in the short term that seem expedient, if they ultimately undermine what’s different or unique about the company.” (Cho, 2008).
In other words, for a company to enjoy enduring prosperity, it must be sensitive to changes in its environment, to which it should react promptly, on the one hand, but be stable, coherent in terms of its identity, mission and vision, on the other hand. Collins and Porras (2006) confirm this viewpoint and identify the ability to manage continuity and change simultaneously as a basic feature of companies that have reached long-term success. This kind of companies relies on a set of timeless core values; they are driven by a purpose that transcends merely making more money and have the capability to continually renew from within.

Smith pinpoints the specific ability of the learning organization to adapt, to renew over time, which he labels "dynamic capability" (section 2.2.3.5). “These dynamic capabilities”, he says, “are exercised in the tension which exists between the need to operate from sound business foundations and the need for fundamental business transformation over time.” (Smith, 1999, p. 219).

At the individual level, it is the very the practice of the personal mastery discipline which makes use of the “creative tension” between the current reality and the vision of the desired future, with a view to progressing toward the latter. Therefore, it is reasonable to admit that the practice of personal mastery by individuals across the entire organization will improve its ability to manage the present and also implement the changes required to forge the envisioned common future.

Sustainability is a never-ending becoming (see section 1.3), and therefore it is a priori a long-term objective. Hence, a sustainable world or a sustainable business cannot come into existence before being envisioned. It follows that directing the company toward sustainability requires a positive, energizing vision of the desired sustainable future (Senge, 2009; Ehrenfeld, 2004). In an organization, only its members can create a complete, compelling and energizing vision (Meadows, Randers and Meadows, 2004).

It is necessary for the members of an organization to share a vision for the sustainable future of their organization. In a learning organization, the shared vision, rooted in the personal visions of the individuals, will most likely transcend the mundane profit making goal, as most people’s personal visions usually include “dimensions that concern family, organization, community, and even the world” (Senge, 2006, p. 197). As a result, it is likely that the individuals in such an organization can generate a shared vision for sustainability, and that their ability to
use creatively the tension between the present reality and the imagined future will enhance the company’s ability to take the route to and progress toward sustainability.

The interrelationship between the shared vision and the discipline of personal mastery regards equally the top management team of an organization. This relationship can be vital to the resolution of the contradictions between long-term and short-term objectives. Let us elaborate on two related aspects.

The first aspect refers to the risk of managers getting discouraged by the challenge of sustainability, not only because of the vague formulations of the concept itself, but also because sustainability goals seem so very distant, imprecise and hard to measure (Wirtenberg, Russell and Lipsky, 2008). Over time, this may lead to the erosion and even abandonment of the vision, resulting in the emergence of a phenomenon represented by the "Eroding goals" system archetype (Senge, 2006, p. 394), shown in figure 3.3.1 further down.

The phenomenon occurs mainly because of the time lag needed for the sustainability-oriented actions to pay dividends, indicated as "delay" in the figure. The gap between the vision and the current (immediate) reality causes a tension in the organization, which tension tends to increase with the widening gap induced by the undertaking of new actions for sustainability. This tension induces pressure toward vision deterioration. The discipline of personal mastery offers the management team the necessary tools for growing awareness of the phenomenon, and keeping it in check. The management principle to be applied when the phenomenon occurs is "Keep the vision" (Senge, 2006, p. 94), which requires very good skills on the part of the management team members in creating and managing the shared vision.

The second aspect is the possible occurrence of a phenomenon represented in systems thinking by the "Success to the successful" archetype (Senge, 2006, p. 396). The phenomenon stems, inevitably, from the fact that the long-term sustainability objectives compete with the short-term objectives for the same limited resources. The short-term oriented actions usually deliver immediate results and, thus, become more likely to be assigned more resources while long-term objectives tend to be neglected (the pressure resulting from greedy shareholders could contribute to the emergence and acceleration of this phenomenon).
Owing to the shortage of resources, the intermediate outcomes of long-term goals will not meet expectations, which will cause more resources to be directed toward the short term, thereby creating a reinforcing loop. Over time, short-term initiatives will increasingly receive more attention and resources, while the long-term objectives will end up adjusted "downward", neglected or even abandoned (a manifestation of the theories-in-use), even if this is not going to be fully admitted (evidence of the espoused theories). Thus, the reinforcing loop leads to losing sight of the strategic direction and focusing solely on the short term.

The ability of the management team to practice systems thinking will, most likely, help recognize this phenomenon. It can be counteracted by applying management principles that lead to incorporating sustainability considerations.
organically into the business strategy so that the two types of objectives (short- and long-term) are derived from the same major goal: long lasting business prosperity. We also underline the importance of generating and maintaining the vision “alive”, and of utilizing the tension between the current reality and the envisioned future constructively, in order to increase the management team’s prospects of paying balanced attention and allocating proportionate amounts of resources to both types of objectives.

Garrat (1999) formulates the essence of the learning organization as the capability of critical reflection on and continuous learning from what takes place inside and outside the organization, in order to allow adapting to the changing environment.

The capacity to adapt is a win obtained by learning through experience, as organizational efficiency (Garrat, 1999) and continuous improvement (Senge, 1999) are also natural benefits of a learning culture. The ability to transfer the results of experiential learning toward increasing operational efficiency and delivering continuous improvement is key to achieving cost reductions and to raising financial performance. This is true, for instance, of companies that adopt sustainability strategies of reducing pollution and waste resulting from their processes in order to achieve eco-efficiency (Sharma and Vredenburg, 1998).

Organizations that learn through experience are also likely to attain better long-term results than other organizations since their strategies tend to be flexible enough to allow them to adapt on the fly. Therefore, due to their learning capabilities, they can make the best of the rapidly changing conditions in their environment and of the opportunities those changes create (Mintzberg, Ahlstrand and Lampel, 1998).

A good strategy and excellence in execution are seen as basic qualities of a healthy company, with the prospect of superior long-term results, according to Richard Rumelt of UCLA Anderson School of Management (cited in Lovallo and Mendonca, 2007).

A good sustainability strategy is essentially the result of a strategic management process that ensures alignment between the company and its environment over a time horizon as long as possible (Wirtenberg, Russell, Lipsky, 2008).
3.4. Learning, knowledge creation, and sustainability

After analyzing the strategy formation process Mintzberg, Quinn and Ghoshal (1995) identified two components of a company’s strategy. The first one is a deliberate, realized as intended component, generated in its “pure” form through a planning process. The second one is an emergent component, developed through an ongoing adaptation process, resulting from a decisional and behavioral consistency in the organization over time, founded on the mission, vision and the organization’s system of values.

The weight of the two components may differ from one organization to another, but both are needed because the deliberate component implies control, while the emergent component signifies learning. In order to be viable, strategies need to marry the two components so that control is exercised to an adequate extent while learning is equally encouraged and nurtured (Mintzberg, 1987).

For this to happen the traditional top-down process of strategy development has to be complemented by processes that include mechanisms and approaches that allow initiatives stemming from internal and external interactions, from ideas and knowledge generated at all levels of the company to feed into the emergent component of the strategy. These processes, which are learning processes by their nature, will have to efficiently connect the strategy formation process with the evolution of the market, with customers (Saint-Onge and Armstrong, 2004) and with the relevant stakeholders.

Therefore, the strategy development process should consist in capturing all that managers learn from various sources (both tacit and explicit knowledge distilled from their own experience and from the experience of the other members of the organization, as well as from the raw data furnished by market studies and analyses) and in synthesizing what has been thus learned in a vision of the direction the organization should pursue (Mintzberg, 2000). We believe that the learning organization has the capability to provide the required approaches and mechanisms for this to happen. Furthermore, its features have a strong impact not only on the process itself, but also on the quality of the ideas and knowledge involved.

We will now turn to the model developed by Nonaka and Takeuchi (1995) (detailed in section 2.2.3.4), with its underlying “knowledge spiral”, to show how the
learning organization favors the creation and accumulation of knowledge, which is then put to use toward the development of a strategy for sustainability.

We follow this approach because the knowledge spiral has the potential to elicit the innovative thinking needed for the integration of sustainability values into processes, products, services and markets. In fact, the concept was proposed as a response to the quest for how innovative thinking is generated in “large business organizations – be it technical innovation, product innovation, or strategic or organizational innovation.” (Nonaka, 1994).

Although each mode of conversion in the knowledge spiral can lead independently to knowledge creation, the power of the concept resides particularly in the dynamic interaction among the four knowledge conversion modes. It is this interaction that ensures “it’s capability to create new knowledge, disseminate it through the organization, and embody it in products, services, and systems” (Nonaka and Takeuchi, 1995). Therefore, we will conduct the discussion at the holistic level, pertaining to the entire cycle of the spiral, as well as at the level of each conversion mode.

From the perspective of the organizational knowledge creation cycle, double-loop learning is commonly practiced in the learning organization. By cycling through the knowledge spiral, those organizations create new knowledge by reconsidering perspectives, and by reexamining thinking frameworks and hypotheses (Nonaka, 1994). This type of learning is supported by the disciplines of team learning and mental models, and it’s critical for generating innovative, discontinuous leaps of “creative destruction” of the existing industrial processes (Willard, 2005). It is also needed for absorbing the sustainability values into everything an organization does.

The organizational knowledge creation process is based on the repeated and unceasing changeover between tacit and explicit knowledge, during which new ideas and concepts are shaped. For that transformation to be effective, the decisive factors are the level and quality of the interaction among the individuals in the organization who take part in generating and sharing knowledge. That interaction can happen within teams, departments or communities of practice, which can transcend the inter- and intra-organizational boundaries.

The disciplines of the learning organization such as team learning and mental models can prove determining for the quality of that process through the openness and mutual trust they generate. Similarly, the disciplines of personal mastery and
shared vision can support the process through the commitment and sense of autonomy they induce; purpose serves as the basis of conceptualization, and autonomy gives individuals freedom to absorb knowledge (Nonaka 1994).

As we have discussed elsewhere in the book, organizational knowledge creation takes place when the four modes of knowledge conversion (Socialization, Externalization, Combination and Internalization) chain to form a continuous cycle, the knowledge spiral. Nonaka (1994) found that various “triggers” induce the shift between the conversion modes. We believe that the disciplines of the learning organization help the activation of those triggers and the working of each mode of conversion, thus facilitating the creation and accumulation of the knowledge needed in the development of a sustainability strategy.

Sharing tacit knowledge through Socialization raises the level of (tacit) knowledge at all organizational levels. We believe Socialization is critical to pursuing business sustainability, as it is at this stage that the organization and its members can understand and apply the practical aspects of sustainability and internalize its desiderata. Therefore, in the discussion about sustainability we are interested in the quality of this phase of knowledge creation.

The Socialization stage is usually set in motion through the building of a team or a “field of interaction” (Nonaka, 1994). We consider the communities of practice (Wenger and Snyder, 2000) together with the disciplines of team learning and mental models to be central to this stage because they facilitate the sharing of individual experiences and perspectives in the common effort to develop a strategy for sustainability.

Team learning facilitates the development of the team and the creation of an atmosphere of openness and mutual trust, which is a must when sharing the tacit, personal meaning of the knowledge of team members. The discipline of mental models provides the necessary tools, since tacit knowledge involves cognitive elements centered on mental models that help individuals to perceive and define their world.

Nonaka (1994) notes that “the cognitive element of tacit knowledge refers to an individual’s image of reality and visions for the future, that is to say, what is and what ought to be”. It is the discipline of personal mastery that involves primarily the practice of training an individual’s ability to manage simultaneously a personal vision
for the desired future and a clearly defined image of the present; that ability, we observe, is determining for the individual to adopt an orientation toward sustainability. At the same time, the road to sustainability is founded on commitment throughout the organization (Schmidheiny, 1993), with Socialization being a factor in building organizational commitment through developing and sharing tacit knowledge. Only individuals who “master” their own vision of a sustainable future, stemming from accumulated personal knowledge, can effectively share that vision and contribute to the organization-wide process of shaping an overall vision to which the organization can commit.

We have to point out the importance of the interaction between the learning organization’s disciplines of personal mastery and shared vision for inducing involvement and a proactive stance on the part of the organization’s members (Senge, 2006), which shape the generation of the emergent component of the strategy. A lack of commitment and neglect of the personal meaning of knowledge during Socialization can generate knowledge in a form that is not sufficiently developed and defined in order to be disseminated. If we paraphrase Nonaka (1994, p. 20), we can say that in such a case the “shareability” of generated knowledge “may be limited and, as a result, difficult to apply in fields beyond the specific context in which it was created”.

From what we have discussed previously, we can infer that the dimensions of the learning organization favor the creation of “shareable” knowledge, which would make the Socialization of the knowledge produced within the top management team more effective. Sharing and using that knowledge across the organization is crucial for the success of developing and implementing a sustainability strategy.

The Externalization is executed through successive rounds of meaningful interpersonal communication (Nonaka, 1994). The likelihood of conversations in an organization and their quality are directly influenced by the disciplines of team learning and mental models.

Team learning fosters the occurrence of conversations through the balanced utilization of dialogue and discussion. Potentially complementary, both types of conversation are important for the team’s capability to create generative learning, particularly when used in a synergic manner. It is this kind of learning that enables
the company to incorporate sustainability values into its strategy, processes and products.

Through dialogue, complex problems can be explored, as the team can examine individual and collective assumptions, ideas, beliefs and feelings relative to the desideratum of sustainability. The various perspectives can be scrutinized as a means toward the discovery of a new, common view.

Through discussion varied viewpoints can be debated, this process being able to provide a useful analysis of the situation and means for deciding on a preferred view, which can be one of the initial options or a completely new perspective.

The exploration of the various points of view, both in dialogues and discussions, can be enhanced by the mental models discipline through two main categories of skills it nurtures: reflection and inquiry.

The discipline of systems thinking can also be useful for Externalization in two ways:

– it provides a common language to express, represent and address complex problems, such as those raised by business sustainability, and
– it offers specific tools, such as systems dynamics (Sterman, 2001), rich pictures (Checkland, 1981; Checkland and Scholes, 1990), and system archetypes and diagrams (Senge, 2006), which can assist in identifying and representing variables and relationships to be used in addressing and solving problems (Senge et al., 2007).

The Combination is the knowledge conversion mode in which the organization can connect with external stakeholders to obtain explicit knowledge from them, which will be combined with explicit knowledge generated internally to form new and enhanced knowledge. Then this is disseminated and exchanged through meetings, conferences, and other communication platforms. Interacting with relevant stakeholders during this conversion mode is an important source of information, meaning, vision and innovative ideas to feed into the concept of sustainability developed by the organization (Hart and Milstein, 2003).

The disciplines of team learning and mental models will, most likely, prove indispensable throughout Combination, in the process of connecting with the relevant stakeholders. The two disciplines can lead to the development of organizational attributes that are basic for a fruitful collaboration with the
stakeholders such as transparency, the capacity for dialogue, the lack of defensiveness, the availability for questioning and changing one’s own mental models and accepting the different mental models of others, reflection and inquiry skills.

According to Senge et al. (2007) team learning and mental models give rise to capabilities that originate the development of knowledge throughout the organization. Those capabilities serve further for generating deep interpersonal collaboration in teams and groups in the organization, which can produce new skills that extend the ones stemming from the learning organization. They are necessary for dialogue and for the development of a shared vision together with the external stakeholders, of which some are traditionally “on the other side of the barricade”.

The process of connecting with the relevant stakeholders and combining their knowledge with knowledge internal to the organization also depends on the practice of systems thinking because it conditions the way individuals and organizations perceive themselves in relation to the entire world. That dimension of the learning organization will prove important, for example, when moving to stages 4-5 of the route to sustainability (per figure 1.4.2.1). To reach those stages companies need to think not just how to change their own modus operandi, but also how the larger system within which they operate should be transformed (Zadek, 2004; Willard, 2005; Senge et al., 2008). The systems perspective is also essential in actions aimed at creating shared value (Porter and Kramer, 2011).

The Combination stage of the knowledge spiral “is facilitated by such triggers as ‘coordination’ between team members and other sections of the organization” or external stakeholders, and “the ‘documentation’ of existing knowledge.” “Through an iterative process of trial and error, concepts are articulated and developed until they emerge in a concrete form” (Nonaka, 1994). The Combination mode will feed into the strategic level decisions, thus carrying with it the underlying influence of the learning organization disciplines on the sustainability strategy.

Since sustainability is an ideal that keeps shifting as new knowledge is accumulated, the process of developing and implementing the sustainability strategy needs to be iterative (Senge et al., 2008). That “trial and error” process can trigger the Internalization knowledge conversion mode through “learning by doing” (Nonaka, 1994).
By Internalization the vision and the direction that will guide the organization become part of the organization’s individual members’ knowledge, adding to the organization’s accumulated knowledge. Through this conversion the sustainability values can feed into the organizational and personal system of values. The dimensions of the learning organization can support Internalization in a way similar to supporting Externalization.

The learning organization is now ready to enter a new cycle of knowledge creation, distribution and assimilation.

Returning to a holistic view of the learning cycle in Nonaka and Takeuchi’s model, we notice the two-way relationship between the shared vision for sustainability and the knowledge spiral cycle.

On the one hand, the four conversion modes of the knowledge spiral constitute the “lab” in which the shared vision is “forged”, in the organization’s social units, in which managers can become cognizant of the organization’s members’ personal vision in order to shape a shared vision, positive and energizing, for the desired future. The relationship is explained by Nonaka (1998) as follows: “because tacit knowledge includes mental models and beliefs in addition to know-how, moving from the tacit to the explicit (and the other way around – note ours) is really a process of articulating one’s vision of the world – what it is and what it ought to be. When employees invent new knowledge, they are also reinventing themselves, the company, and even the world” (Nonaka, 1998, p. 31).

On the other hand, the sustainability vision will guide the organizational learning effort like a “north pole” for the innovation creation effort.

We emphasize that a vision developed and internalized through the cyclic process of the knowledge spiral comes close to an ideal organizational “shared vision”. This is important because business leaders face the difficult task of creating a vision that is based on the shared values and personal aspirations of the organization’s members, if that vision is to be accepted and followed by all members, i.e., to be a shared vision (Kousez and Posner, 2009). A shared vision is necessary because the difficult road toward business sustainability stands better chances of success when people strive to achieve something that really matters to them, when the effort is worth people’s dedication.
Additionally, we believe that a vision shared all over the organization can prevent losing sight of long-term objectives in favor of short-term gains, an issue that has been discussed in section 3.3.

Also, a truly shared vision can be a valuable source of internal cohesion and, consequently, a strength on which to build competitive advantage (Oncică-Sanislav, Goda and Cândea, 2010). This is consistent with Berlew’s (2001) views: “A vision, no matter how well articulated, will not excite or provide meaning for individuals whose values are different from those implied by the vision. Thus, the corporate executive who dreams only of higher return on investment and earnings per share may find his vision of the future rejected and even resented by members of his organization. Indeed, he may even find his vision of a profitable corporate future questioned by stockholders concerned with the social responsibility of corporations. Progressive military leaders may articulate a vision or mission congruent with the needs and values of the young people they are trying to attract to an all volunteer service, only to discover that the same vision conflicts with the values of their senior officers”.

Finally, we note the similarity between the process of knowledge conversion, represented by the knowledge spiral, and the process of strategic learning at the organizational level called the learning flywheel for sustainability (shown in figure 1.4.1.4). They both support the learning through which organizations need to go in order to progress toward sustainability.

3.5. A systems perspective

Results like long-term survival do not occur fortuitously, rather they depend on the ability of the company’s senior management to grasp the happenings in the business environment and to take appropriate action; in other words, those results hinge on learning (de Geus, 1998, p. 1). More specifically, long-term success depends on institutional learning, defined by de Geus as the way the top management team changes its mental models of the company, of the market and competitors.

The mental models of managers, which Hamel and Prahalad (1994) call management frames of reference, determine the assumptions, attitudes and accepted practices that shape the way a company perceives itself and the industry in
which it operates, and mold the competitive strategies that are developed. Although mental models are usually invisible, their presence is revealed by the way top managers understand the meaning of being strategic and the choices they make in terms of competitive stratagems (Hamel and Prahalad, 1993).

It follows that mental models influence the way a company deals with competition and determine its competitiveness. According to the two authors, what prevents companies from creating their future is an “installed base of thinking – the unquestioned conventions, the myopic view of opportunities and threats, and the unchallenged precedents that comprise the existing managerial frame” (Hamel and Prahalad, 1994, p. 66).

Because of all of the above, long-term competitiveness may depend on the managers’ willingness to bring into the open and grow aware of, question and discuss their own mental models, and on their ability to change those models whenever the realities of the competitive environment demand it (Hamel and Prahalad, 1993). That is to say, it appears that the long-term competitiveness depends on the managers’ ability to practice in their teams two of the key disciplines of the learning organization: mental models and team learning.

The practice of the discipline of mental models in the learning organization has the major potential of helping the company stay competitive for a long time; we will detail this further.

Questioning mental models based on double-loop learning will prompt managers to “reflect critically on their own behavior, identify the ways they often inadvertently contribute to the organization’s problems and change how they act” (Argyris, 1991).

By the discipline of mental models managers improve their ability to recognize and exploit fully potential emergent strategies (Mintzberg, 1994) – which can sometimes revolutionize the company's strategy, i.e., the way the company competes in the market – and its competitive context (Hamel, 1996).

A strategic approach that opens up new horizons in competitive positioning is to integrate social and environmental concerns into business strategy and thus create a unique socially responsible customer value proposition. However, to develop the capability to follow such a strategic approach requires alteration of the managerial mental models. Perceiving social responsibility as an opportunity to
"create shared value" (Porter and Kramer, 2011) rather than just a PR campaign or a demonstration of good corporate citizenship “will require dramatically different thinking in business” (Porter and Kramer, 2006, p. 13). Strategic future-oriented efforts inspired by a vision of sustainability require a shift in the management thought framework from mental models dominated by events to mental models that recognize patterns in the processes that take place in the competitive environment and in the underlying structures of those patterns (Senge, 2006). It is necessary to move from linear thinking, which dominates most of the current thinking when making critical decisions, to management thinking founded on understanding the change patterns and the existing systemic interconnections and dynamic complexity (see section 2.2.2.5 on systems thinking). Therefore, practicing the discipline of mental models turns out to be a necessity for managers who are aware of how strategically challenging is the goal of sustainability for their organization.

We should note though that the ability to consciously challenge mental models does not suffice. It can improve the capability to understand, but not necessarily the ability to act.

For an organization to adopt viable strategies for sustainability it must understand both "Why?" and "How?" it is supposed to act in harmony with the larger system of the economic, natural and social environment. Systems thinking is the discipline that appears to be the determining factor in triggering and feeding the change in mental models (Oncică-Sanislav and Cândea, 2009.b) in the radical manner discussed above, leading to the development of systems mental models (Hopkins, 2009).

A strategy can be considered successful if it positions the organization so as to enjoy an uninterrupted alignment between its internal and external environments (Wirtenberg, Russell, Lipsky, 2008). A robust strategy is built on a mission and on goals that keep the organization positioned to an advantage in the outside world, and guide the creation and re-creation of the competencies necessary to achieve sustainable success. In this context strategy development involves taking two views of the relationship between the inside and the outside of the organization: one that implies an inside-out approach and another one, which is an outside-in approach (i.e., from the competitive environment inward). Systems mental models have the potential to support business sustainability under both approaches.
Regarding the inside-out approach, systems mental models can improve the managers’ ability to devise value-creating activities that interconnect and reinforce each other in order to bring forth what Porter (1996) calls a “strategic fit” at the level of the entire value system (or supply chain). The strategic fit is essential not only for gaining competitive advantage, but also for sustaining it (Porter, 1996). This is consistent with the systems theory, which holds that simply optimizing each subsystem will not optimize the entire system; the interaction between subsystems has to be harmonized and optimized too (Smith, 1997; Ackoff, 1999). Management thinking based on systems mental models enables an overview of the network of organizations involved in creating the product offered to the end customer and will call, for example, for the company’s suppliers to be also included in the analysis. This ability is essential for attaining the higher levels (stage 3 and up) of the evolutionary model toward sustainability in figure 1.4.2.1.

Besides bringing forth the overall system perspective, the management frames of reference that result from the practice of the mental models and systems thinking disciplines will improve the deliberate process of integrating technologies, knowledge and skills that reside in the subsystems in order to give rise to the organization’s core competencies (Prahalad and Hamel, 1990). The core competencies found a company’s claim to uniqueness and its distinct strategic positioning in other words, underlie its competitive advantage.

We mention also the role the disciplines of personal mastery, organizational learning and shared vision can have in the development of core competencies. This is implied in Prahalad and Hamel’s (1990, p. 82) definition of core competencies as the results of “collective learning in the organization especially how to coordinate diverse production skills and integrate multiple streams of technologies” and “communication, involvement and deep commitment to work across the organizational boundaries.”

Turning now to the outside-in approach we note that it starts with analyzing the forces and trends of the general external and industry-specific environments in order to identify potential opportunities and threats.

The systems perspective points to the existence of multiple levels of understanding the situations as perceived from outside and inside the organization (as discussed in section 2.2.2.5). Practicing simultaneously the disciplines of systems thinking and mental models in management teams will lead to a deeper
understanding of the structure and dynamic complexity of the operating environment of the organization. This will lead to the transformation of the management frames of reference, which makes it more likely to adopt an advanced sustainability-oriented managerial response, like stage 4 – Integrated Strategy – of the model in figure 1.4.2.1.

The effect of deeper understanding on management action is represented in figure 3.5.1, where the "iceberg of systems thinking" (taken from figure 2.2.2.5.1) is complemented to show the management response associated with each level of the "iceberg", and how this leads to the various stages of the progressive process shown in figure 1.4.2.1.

![Figure 3.5.1. The managerial response as a function of the level of understanding of the determinants behind the sustainability phenomenon](image)

The relationship we postulate in figure 3.5.1 between the level of understanding and the level of managerial response relies on two aspects. On the one hand, the deeper organizations understand the systemic nature of happenings,
the better they comprehend their interdependence with the economic, social and natural environments and internalize one of the fundamental principles of systems thinking: in order for a component/subsystem to be successful the other components of the system must be successful too. On the other hand, it is likely that understanding the systemic structures underlying long-term trends will induce a generative managerial response resulting in strategies for the sustainability of their own organizations and in interventions in the wider system that comprises the organization to support system sustainability (Zadek, 2004; Willard, 2005; Senge et al., 2008). An even deeper understanding of the system in its entirety will allow a better grasp of long-term trends and, as a consequence, will bring about a transformative response based on a better vision of the future and leading to long-term adaptability.

3.6. The learning organization, and sustainability: our model

It has been our objective to prove by reasoning that the disciplines of the learning organization can found the development of a managerial thinking and of an organizational culture that will address business sustainability through sound, proactive sustainability strategies. It became, thus, apparent that the paradigm of the "learning organization" has a high potential to prescribe the characteristics of an organization that holds, inherently, higher prospects for sustainability.

Moreover, the learning organization gives evidence of its ability to harmonize the relationship between change and continuity. In other words, it possesses the flexibility to implement the changes called for by the knowledge and experience it has acquired with time, while being able to keep the route mapped out by its strategic purpose and its sustainability vision.

We are now proposing a model that reflects our two secondary hypotheses, which support the main hypothesis of our research. The part of the model representing secondary hypothesis 1 (repeated in the footnote for convenience25) is shown in figure 3.6.1.

25 Secondary hypothesis 1: The disciplines of the learning organization, when learned and practiced, shape and bolster up the long-term orientation of an organization and its ability to develop good, robust strategies for sustainability.
This part of the model should be seen as consisting of two interrelated levels. Level "0" comprises the learning cycles of the "knowledge spiral" (Nonaka and Takeuchi, 1995), cycles that occur in teams and communities of practice (Senge, 2006). Those cycles underlie the other elements of the model situated at level "1", i.e., four disciplines of the learning organization and the strategy development process.

The model places learning in teams and communities of practice centrally on level "0" because it is the keystone of the learning organization according to Senge
(1990, 2006), Nonaka (1991) and Garvin (1993), due to its essential role in creating the knowledge circulated throughout a learning organization. Our model also implies that the creation of the shared vision, challenging mental models, creation of dynamic capabilities and the development of systems thinking cannot occur in the absence of the learning cycles at level "0" (Oncică-Sanislav and Cândea, 2010). Thus, the learning processes at the level “0” appear to lie at the basis of developing a sustainable business.

A transversal perspective of the model is represented in figure 3.6.2.

![Figure 3.6.2. Cross section through the model](image)

The second part of our model reflects secondary hypothesis 2 (reproduced in the footnote\textsuperscript{26}). Here, by following the previous arguments, we synthesize the correlation that appears to exist between the characteristics of the learning organization developed inside an organization and the stage the organization reaches on its road to sustainability (refer to the model in figure 1.4.2.1).

– When the organization is at stage 1 (Non-Compliance) or 2 (Compliance), the organizational limited systemic understanding determines it to stay reactive to

\textsuperscript{26} Secondary hypothesis 2: The disciplines of the learning organization are critical for an organization’s progression through the evolutionary stages toward sustainability.
events (as discussed in section 1.4.1). As a result, it adopts largely a short-term perspective.

Learning at the level of the management team is of the single-loop type. There is no capability or wish to question the traditional deeply rooted management paradigms regarding the way the company creates value. The issue of sustainability is not part of top management’s agenda and, consequently, a vision of sustainability is not developed.

However, organizations at stage 2, Compliance, set themselves apart from those at stage 1 by a systems thinking developed enough to enable them to perceive trends relative to how social and environmental issues are approached in society, which induces an adaptive attitude of compliance with regulations and public pressure. The adopted perspective is short to medium-term, still insufficient for following an effective orientation toward sustainability.

– Organizations at stage 3, Beyond Compliance, develop a level of systems thinking that enables them to identify the systems structures in their operating environment, which facilitates a creative managerial response. At the organizational level, this kind of response shapes a proactive compliance behavior. The adopted perspective is medium to long-term, which may engender a sustainability-oriented conduct.

From the point of view of addressing sustainability management’s learning is still single-loop, the main arguments in favor of some sustainability practices being limited to reducing costs and improving company image. In other words, classic management mental models of value creation are not challenged, but rather complemented or extended. As a result, the shared vision of sustainability, even if it exists, is bound by the old management paradigms.

And yet, it is very likely to find team double-loop learning at the operational level – this is the level where innovation for sustainability concentrates in stage 3 organizations (Senge et al., 2008). It is even possible for a vision of sustainability to exist and be shared at the level of working groups, teams or communities of practice. The knowledge acquired in these groups could be transferred to the whole organization through team learning and organizational learning mechanisms. Applying the disciplines of the learning organization at the operational level could generate eventually a shared vision of sustainability for the entire organization, could establish best practices, transform management mental models with respect to the
advantages of sustainability, and help the organization move forward to the next stage.

– Organizations at stage 4, Integrated Strategy, reach a higher level of systems thinking, which should make them able to perceive the need to rethink the business purpose and mission. They adopt a long-term perspective and, thus, a shared vision of business sustainability is likely to be developed at least at the level of the top management team.

Double-loop learning is in all probability present in the team learning at all organizational levels and mental models are being continuously questioned. Various stakeholders are no doubt being actively involved in the learning process, which involvement can fuel the integration of sustainability aspects into the organizational vision and strategy. In order for the organization to have reached this stage it had to challenge and alter the old mental models of value creation.

All disciplines of the learning organization are being practiced.

– Organizations at stage 5, Purpose/Mission, are not that much different from the ones at stage 4 in that, again, all five disciplines of the learning organization are put to use. As far as the vision of sustainability is concerned, it is more likely to be shared all through the organization. Personal and organizational values give rise to this vision and, thus, becoming sustainable turns out to be the raison d'être of the organization. Another difference comes from the wider responsibility presumably assumed by stage 5 organizations, which see the need to engage the broader system consisting of customers, competitors, suppliers, regulators and other stakeholders in a collaborative effort toward a sustainable common future. Some stage 5 companies go even further by looking at a “meta-strategy” (Zadek, 2004), namely envisioning ways to build the future relationship between business and global society.

Our model, which rests on assumptions and theoretical inferences and connections, will need to be put to the test by field research. In the next section we present our research methodology.

3.7. Methodological considerations

We chose to use qualitative research exclusively because of the following characteristics of our hypotheses and the constraints they impose:
1. We are researching the relationship between two complex concepts – business sustainability and the learning organization – underlain by dynamic, fluid and continuously changing phenomena. This is relevant to the choice of the research methodology for two reasons:

– The methodology we adopt should allow us to study the two concepts in an organizational context as they evolve, which will enable us to expand and deepen, by means of empirical data, our earlier theoretical findings.
– The complexity of the two concepts makes it virtually impossible to capture and understand quantitatively the multitude of aspects involved. An attempt to build a quantitative model would run the risk of missing out connections between the concepts.

2. Since the sustainable business and the learning organization need to be looked upon as social processes, their characteristics need to be studied over long periods of time. Quantitative analysis of samples taken at discrete points in time would require repeating the procedure at large time intervals, which is not feasible.

3. The phenomena associated with the two concepts are beyond the control of the researcher.

Our research methodology combines three research methods: bibliographic study (Iluț, 1997), modeling (Grosu, 2000) and case studies (Stake, 1995; Yin, 2005; Yin, 2012). This combination of methods was both necessary and feasible: constructing a theoretical framework intended to guide us to design the case studies and collect the necessary data is essential for developing good case studies (Radu, 1994; Yin, 2005; Yin 2012), while modeling provides structure to the case study analysis.

The role of models is to describe and represent schematically, systematically and in an unavoidably simplified manner (Mureșan, 2005) the possible relations between concepts and phenomena. They are useful because they help us comprehend complexity and structure our research. Thus, the models of organizational learning and of the learning organization presented in Chapter 2, along with our model of the relationship between the learning organization and sustainability, directed our choosing an appropriate approach to the case study analyses of Chapter 4.

We chose the case study as a research method because it has a bifocal approach to research. On the one hand, the case study based research emphasizes
how important the context and other complex situations that surround the case are for understanding it, and demands that they be examined. On the other hand, the distinctive feature of the method consists in its potential to bring a quite detailed and in-depth understanding of the cases analyzed in their real-life context; obviously, the more cases we study, the better our grasp of the phenomenon becomes.

The case study method has been applied successfully to studying both the functioning of organizations (whether for-profit or nonprofit) and topics related to economic and social development in general (Yin, 2012, p. xxi). The scope of our research spans both fields, which, again, recommends adopting this method.

The method consists of a set of procedures (which also constitute the stages of research), four of which are: 1) designing the case study (research design), 2) collecting the data, 3) analyzing the data, and 4) presenting/reporting the results (Yin, 2005). We will detail in what follows the specifics of the method applied to our research.

3.7.1. Research design

Designing our research entails three key steps, which will be detailed in what follows: specifying the unit of analysis, organizing data acquisition and selecting a data analysis strategy.

3.7.1.1. Defining the unit of analysis ("The Case")

Defining the unit of analysis is an essential step in case study research. Customarily, the unit is a clearly delimited entity, which can be a person, a group, an organization, a community or even a behavior or a social phenomenon, etc. Given that our research interests are in the area of business the unit of analysis will be a for-profit organization or a subunit thereof (team, department, business unit, etc.). An alternative is to study the subunit not as a standalone entity, but rather embedded in the larger organization.

a. Selecting the structure of the cases to be developed

A decision we made early on was to not limit ourselves to studying just on case; instead, at least 2 case studies will be addressed. This is because a design involving the study of more than one case can provide a higher degree of confidence in the results and a higher potential for generalization. In addition, the analysis of
several representative cases can bring a deeper understanding of phenomena and processes (Stake, 1995).

According to Yin (2012, p. 8) the selection of multiple cases should follow the same logic that defines a set of multiple experiments, each experiment (i.e., case) targeting the examination of a complementary facet of the main hypothesis. One of the cases we studied (Nike, Inc.) was selected in an attempt to replicate directly the theoretical model we developed (i.e. the conditions hypothesized by the model as necessary for progressing toward sustainability exist in the case), while the second case (Romtelecom S.A.) was selected due to its potential use for theoretical replication (i.e., aimed at producing contrasting results compared to the first case for reasons predicted by the theoretical model).

b. Deciding how to use theory

This step involves deciding on how to use (or not) theory in the next methodological steps of case study development: designing the research questions (and the associated protocol), selecting the cases, defining the relevant data to be collected, analyzing the collected data, etc. The decision we made was to ground our research in theory. As this is an important decision, with direct implications on all phases and methodological steps, we will return in section 3.7.2 with more details about why we made this decision and how we use theory in case studies.

3.7.1.2. Organizing data acquisition

Data acquisition and processing for analysis are very important in preparing case studies. Therefore, we find it necessary at this stage to specify how data will be obtained: the principles underlying this activity, data selection methods, etc.

Our data acquisition followed two basic principles: using multiple sources of evidence and creating a database specific to each case. Case studies need collection and systematic analysis of data having in view a possible generalization through analytical research.

The basic principle of data collection and data interpretation is the triangulation of data sources, used to obtain converging lines of evidence. Data triangulation involves using multiple data sources, as different as possible, and

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27 Analytical research is non-statistical and is based on critical thinking. “Why” and “How” are the main questions addressed in order to gain insights into phenomena and discover cause-effect relationships among variables.
checking out their consistency (Patton, 1987). The principle of triangulation applies to the case study method well because the method itself rests on employing a large variety of sources of data.

According to Yin (2005, p. 121) and Bogathy (2004) triangulation of data can help improve construct validity by cross checking with multiple sources of evidence that provide various measures of the same phenomenon; if we find agreement among data sources we grow more confident that our description of the phenomenon is truthful.

Referring now to the data acquisition for our research, in designing the Romtelecom S.A. case study we used most of the data sources specific to the case study method (Yin, 2005): direct observation, open individual and group interviews, archives, publications (internal, mass media and from regulators), cultural artifacts, etc.

However, for the development of the Nike, Inc. case study we did not have access to two important tools of the method: interviews and direct observation. Although this is not desirable, it does not necessarily hamper the development of quality case studies (Yin, 2009). To go around this shortcoming we looked for and researched published interviews, presentations and speeches given by key persons in the organization.

We also used extensively newspaper articles (especially available online), public documents of the company, studies and publications of NGOs, educational and state institutions, etc.

Relative to the secondary sources of information we were well aware of possible subjectivism, which we sought to counteract by parallel tracking information from different sources – for example, examining the information coming from the organization, on the one hand, and from other stakeholders, on the other hand. We were interested in tracking and comparing what are usually nonconvergent and even diverging views, such as those originating from: company reports versus reports or press releases from monitoring agencies and NGOs, newspaper articles in the economic media versus sustainability-related media. Where we identified contrasting viewpoints or perspectives on a topic we went deeper with our research and tried to form an objective opinion.
The case study protocol

An important step in organizing data acquisition is the development of a case study protocol (Yin, 2005).

The protocol, as a tool specific to this research method, consists of a set of proto-questions designed early, well before data collection. Those questions are not meant to be addressed to interviewees, neither to be included directly in questionnaires. They represent only a mental framework, an inquiry agenda the researcher follows as a guide and support during data collection.

The protocol helped us maintain the logic of the sequence of evidence we collected.

Case selection

A first criterion for case selection was a practical one, namely that our study could include only a limited number of cases.

In deciding how many case studies to develop we were constrained by the limited resources and duration of our research project. Rather than expand the number of cases we chose to gather more data on each case in order to raise the level of confidence in our findings and allow a higher degree of generalization.

We decided to produce two case studies and make use of the theoretical replication logic. As for selecting relevant participants in the study, we had recourse to judgment sampling (Mureșan, 2005).

One case was supposed to be representative of companies that reached higher stages of evolution toward sustainability (stages 4 or 5 in the model in figure 1.4.2.1). We used mainly the following criteria for selecting the company:

C1. The organization should have received recognition for its exemplary results in the field of sustainability, with preliminary data indicating a strategic level of commitment to sustainability

C2. The organization should have demonstrated active concern for organizational learning

C3. The organization should have a global impact.

A secondary, but also important criterion was that the company should have excelled or produced exemplary effects in all three areas of sustainable development: economic, social and environmental.
The list of candidate companies was drawn up while carrying out the library research for our project. Initially the list consisted of 28 candidates.

Monitoring and selecting is a resource-intensive process, as Yin (2012) also notes. We collected a large amount of empirical data on the prospective cases by examining annual or quarterly reports of the 28 companies, reports issued by various regulatory agencies, reports published by NGOs, sustainability indices and newspaper or magazine articles, most of them found online. Following the criteria outlined earlier, we made a first selection during 2011, which trimmed our list down to 8 companies.

The next step in the selection process had in view the possibility of obtaining the largest amount of data possible, both on the learning organization and on sustainability-oriented initiatives. The result was that we chose Nike, Inc. as one of our case studies.

We mention that not all candidate companies were dismissed based on the aforementioned criteria. A notable example is BP (British Petroleum), an alleged champion of sustainability during 2007-2012. Unfortunately, the incident in the Gulf of Mexico in 2010 has raised big questions about the quality of being an exemplary case for this research, which made us abandon it, although we might use it as the subject of another study.

If the case of Nike, Inc. is meant to represent companies that are advanced in their pursuit of sustainability, the other case was selected so that the company has a corporate strategy in contrast with Nike’s. In other words, we looked for a company that reached at best stage 3 in the model in figure 1.4.2.1. We had as a goal to obtain an acceptable transferability of the results of the study performed on the two cases by theoretical replication28 (Yin, 2005). As we have already mentioned, we also took into account practical considerations regarding research and data access costs, which are not negligible when developing a case study (Iluţ, 1997, p. 111). We mention finally that we desired to include in our study a local case. This is how we came to choose Romtelecom S.A.29

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28 Theoretical replication is intended to produce contrasting results for predictable reasons.

29 After the reorganization of September 2014 Telekom Romania Communications S.A. became the successor of Romtelecom S.A.
3.7.1.3. Analyzing the data

The analysis of the data collected for a case study can be done by many methods, which are currently not formalized, as is the case with other research methodologies (Yin, 2012; Mureșan, 2005).

Therefore, it is the researcher who has to define an appropriate algorithm for the case study. Establishing a general analytical strategy right from the beginning is a priority in analyzing the data of a case study (Yin, 2005, p. 138).

Our general strategy of analysis relies on theoretical hypotheses (Yin, 2005), while the specific technique of analysis follows the logic of pattern matching (Trochim, 1989), which applies equally to descriptive and explanatory research (Yin, 2005, p. 143). The pattern matching technique consists in checking the alignment of empirical data to an anticipatory model, defined prior to data collection.

To implement this approach we analyzed the relationships that could underlie the fundamental question of our research and developed a theoretical model, all of which were detailed in sections 3.2 – 3.6 of this book.

The aforementioned theoretical model serves as the reference pattern for studying the cases, predicting likely results. The logic of pattern matching leads us to relate, link or match the data directly obtained in the field (the observed or operational pattern) and the predictions made by the model (the theoretical pattern). For internal validity it is important to show that there are no credible alternative theories that can explain the observed pattern. So, we paid particular attention to investigating and analyzing possible alternative explanations to those implied by the theoretical model we proposed.

When the theoretical pattern and the observed one match the internal validity is significantly enhanced30.

3.7.2. The role of theory in our empirical research

Theory plays a critical role, according to Yin (2012, p. xxii), in the development of solid, useful and generalizable case studies. It is useful not only in designing the case study, but also as a vehicle for the possible generalization of the results.

30 If the theoretical and operational patterns do not match there can be a number of causes: the theoretical model may be incorrect, the observations may be unfit or erroneous, or a combination of both.
The theoretical study was used in this book also to discover and recognize the fundamentals for the key methodological decisions: designing the research questions and the case study protocol, selecting the cases, identifying the relevant data to be collected and developing an anticipatory model to use in the pattern matching technique of analysis.

The literature review was aimed at clarifying the complex concepts involved and at establishing the likely relationship among them in the light of the initial hypothesis. The ensuing theoretical considerations of Chapters 1 and 2 of the book led us to develop a theoretical model and the research questions. The model, as described in section 3.6, advances a hypothetical description of how the disciplines and other dimensions of the learning organization, and business sustainability relate. This is the model that generates the theoretical pattern for the pattern matching analysis technique.

The results of the theoretical analysis contributed significantly to the selection of the cases for our research. They provided the criteria for case selection, particularly for the exemplary case.

3.7.3 The research results and quality

Yin (2005) suggests addressing the case study method from the positive perspective. This means that the quality of the case study research can be assessed according to criteria equivalent to those used for quantitative research methods. We will present below four criteria that Yin (2005) considers appropriate for evaluating the quality of any empirical research in social sciences: internal validity, construct validity, external validity and reliability, and will explain how we sought to meet those criteria in our research.

Internal validity refers to the degree of truthfulness of the observed cause-effect relationships (Bogathy, 2004), i.e., internal validity exists when one can state that the observed result is caused only by the variable being studied and by no other variable. In our research, we sought to ensure the internal validity by paying special attention to finding, documenting, analyzing, and eliminating, whenever possible, the potential alternative explanations to the ones suggested by the theoretical model we proposed. Moreover, as commented earlier, the strategy of analysis we have chosen (pattern matching) has the potential to enhance internal validity when the predicted pattern matches the empirically based pattern.
Construct validity concerns "the degree of appropriateness of the tool used to measure the desired theoretical construct" (Bogathy, 2004, p. 38), i.e., the fact that the tool measures what it is meant to measure. We tried to meet this criterion through the case selection process by making sure the cases are relevant to our research (Stake, 1995). By using multiple data sources, a study protocol and a logical chain of evidence, and by presenting the outcome, to the extent possible, to persons who participated in the observed events, we ensured corroboration of evidence and brought better prospects for the phenomenological and meaning validity of our interpretations.

External validity refers to the degree to which the results of a study can be generalized beyond the particular case to the research population and to other situations (Bogathy, 2004). In order to ensure external validity of our research, we were very careful with constructing the theory that is the basis of the case studies, since it sets the generalization level of the results (Yin, 2005, p. 51).

Generalizing case study results should not be approached with the principles of statistical sampling-based research, according to which a correctly selected sample allows generalization to the entire research population (Miles and Huberman, 1994). Rather, in Yin’s view (2005), the generalization should follow the method referred to as "analytic generalization", by which a previously developed theory is used as a pattern against which the empirical results of the case study are matched. If we can analyze two or more cases by pattern matching as part of a direct replication experiment (i.e., ensuring that all cases meet the conditions that the existing theory and evidence anticipate as necessary for obtaining the desired effect) and if the results are the same, then the experiment adds to the generalizability and acceptance of the original study. If we can also make a theoretical replication and if it turns successful, generalizability is further supported.

Reliability is the degree to which an experiment, test, or procedure produces stable and consistent results on repeated trials. In our research we were interested in the reliability of the data collection procedures, which was ensured by the development of a study protocol and a study database.
4. PUTTING OUR HYPOTHESIS TO THE TEST: TWO CASE STUDIES

4.1. Introduction

As explained earlier, we had to confine ourselves to two cases in our research. We are aware of the limits this brings to the generalizability of our findings.

The subject of the first case study, Romtelecom S.A.\(^{31}\), has undergone radical changes during the period of analysis (1997-2011), turning from an entrenched giant monopoly into a customer-oriented\(^{32}\) company, from a provider of landline telephone services into a provider of diversified services: voice, Internet access, entertainment. Our study will cover the evolution of the company over this time period, focusing on internal events, analyzed in the context of their occurrence.

Anticipating the results of the research we can state that, from the point of view of the evolution toward sustainability, Romtelecom S.A. is a company that has hardly progressed during the analyzed period along the route shown in figure 1.4.2.1, from stage 2, Compliance, toward stage 3, Beyond Compliance.

This case was selected so as to have the potential for theoretical replication, i.e., demonstrate that, for predictable reasons, there occur outcomes in opposition to those advocated by our model in figure 3.6.1 and to those produced in the other case used in our research.

The subject of the second case study is Nike, Inc., which is one of the most popular sportswear and sporting goods manufacturers in the world; it was founded in 1964 with an investment of 500 USD by Phil Knight and Bill Bowerman, and has grown into a global leader in its industry.

Nike’s business model is based on outsourcing the manufacturing, keeping in house the design, marketing and sale of products, a common business practice in the industry.

The 1990s find Nike in the middle of a huge scandal over the working conditions in factories where they outsource production, which is turned by civil

\(^{31}\) Romtelecom S.A. was the dominant incumbent telecommunication company in Romania, providing at the end of the study period fixed line telephony, broadband Internet access, leased lines, and pay TV services to the Romanian market. It became Telekom Romania Communications S.A. in September 2014.

\(^{32}\) This change becomes obvious if we compare, for example, the waiting times for the installation of a new phone line: from 3.57 years, on the average, in 1998 versus a maximum of 3 days in 2012.
society into a symbol of the anti-globalization movement and the movement for workers’ rights. As a result one of Nike’s founders declared in 1998 that the firm had come to be seen as a synonym for starvation wages, forced overtime and arbitrary abuse.

However, the year 2012 finds a completely changed company, used as an example for its initiatives in the field of sustainability and considered a top performer in most rankings and indices of sustainable corporations. Thus, Nike, Inc. is among the 80 companies in the world that have managed to maintain their position, in each year between 2006 and 2010, both in the top 500 companies listed by Forbes Global 2000\(^{33}\) and in the DJSI World Index\(^{34}\), according to some studies published in 2011\(^{35}\).

For the same time period, Nike (2012) compiles and makes public a list of over 20 titles and nominations it received in the rankings drawn up by publications and organizations active in the field of corporate social responsibility.

Nike, Inc. case was selected such as to meet the conditions that our theoretical model requires for a company to evolve toward a sustainability strategy. In this case we analyzed, by the logic of pattern matching, the observed pattern and the pattern predicted by the model.

In the Preface we presented the reasons for using 2011 and 2012, respectively, as the final years for the two case studies of this research.

To help the reader follow easily the unfolding of events in the case studies, we chose to move to the footnotes the references that are specific to the case studies, leaving in the text just the general references (also used elsewhere in the book).

At the first reading of the account of events, we recommend that readers ignore the symbols [Rx] and [Nx], which will be used later as references in the presentation of the conclusions.

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33 Forbes Global 2000 is a ranking based on economic performance criteria, which includes the world’s most powerful, most influential, largest and most successful 2,000 publicly traded corporations; [www.forbes.com](http://www.forbes.com).
34 DJSI World is an index that monitors the behavior of global corporations. Evaluation criteria of companies cover their performance in all areas of sustainable development: economic, environmental and social; [http://www.sustainability-index.com](http://www.sustainability-index.com).
35 Cârciumaru and Cândea (2011), Amnășan (2011)
4.2. Romtelecom S.A. case study

The time span of this case study is 1997 – 2011. We analyzed the strategic actions of the company’s management and the evolution of the company during this time period based on company annual reports, financial reports and other information made public by Romtelecom S.A. (hereinafter, Romtelecom), similar documents published by the Hellenic Telecommunications Organization Group36 (hereinafter, OTE) and articles that appeared in the local and international economic press. The analysis revealed to us three time periods relevant for our study: 1997-2003 (that we called the “Investment-Based Strategy” period), 2003-2006 (“Financial Recovery”) and 2006-2011 (“Customer First”). Delimiting the three time intervals is somewhat arbitrary because there is a continuum in the way the determining factors evolved between 1997 and 2011.

Appendix R.1 allows us to gain a historical perspective on the three time intervals in the context of Romtelecom’s history since its incorporation until 2014.

We could not analyze Romtelecom’s strategy and evolution without referring to OTE’s corporate strategy because, as it results from our study, OTE’s strategy decisively determines Romtelecom’s strategic moves, at least during the aforementioned first two time intervals.

4.2.1. The Investment-Based Strategy period: 1997-2003

Corporate governance

The year 1997 marks the first step the Romanian State took in privatizing Romtelecom37, the national state-owned telecommunications operator, by turning it into a quasi-public corporation. Another step, at the end of 1998, is the sale of 21.5% of Romtelecom’s shares to the Greek group OTE, which soon manages to gain control over 35% of the company’s share capital after resorting to a capital increase agreed upon by the Romanian State as part of the transaction.

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36 OTE Group is Greece’s leading telecommunications organization and one of the preeminent players in SE Europe. The OTE Group offers fixed line services (voice, Internet, and data), TV services, and mobile telephony in Greece and Romania, as well as mobile telephony services in Albania (OTE, 2013). In September 2015 Greek OTE decided to rebrand as Cosmote, a brand that brings together fixed, Internet and mobile services, as different from OTE’s operations in Central and Eastern Europe where it uses the Deutsche Telekom Brand.

37 The name of Romtelecom dates back to 1991. It is a company that resulted from reorganizing Rom-Post-Telecom (a self-managed state-owned company).
In a separate agreement OTE acquires from the Romanian State, for a limited time only (until December 2002), an additional 16% of the voting rights in the ordinary general assembly of the shareholders (which brings up to 51% the total voting rights) and, the right to appoint Romtelecom’s CEO. However, the agreement was that OTE’s 51% majority holds only in the ordinary general shareholders’ assembly. Otherwise, the Romanian State retains 65% of the company’s shares and a "golden share", which ensures that it has the majority voting rights in the extraordinary general assembly of the shareholders. Thus the Romanian State has the final say in corporate strategic decisions and other decisions that could affect consumers and competition; it also enjoys the veto power in matters of national security interest.

Corporate finance; operational performance

From a financial standpoint, Romtelecom (without Cosmorom) manages to return to profit in 1999 (after having ended the year before privatization in the red) and increase its profit in 2000. However, the profits seem to have been earned more from increasing the prices of services (97% of the revenue coming from voice services) than from increasing operational efficiency. Two of the metrics (the EBITDA margin and the number of phone lines/employee) did not show substantial improvements. In addition, because of the high level of investing and the adverse effects of inflation and currency exchange rates, the cash flow is negative.

But, at the consolidated level of the Romtelecom–Cosmorom group, large losses are reported for the year 2000, caused mainly by Cosmorom, losses that will increase by the end of this first period of analysis.

Things are improving, though, at the operational level by the end of the time period. It is significant that the waiting list for a new telephone line in early 2002

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38 To quote the OTE (2001) report: “According to Romtelecom’s statutes, OTE cannot exercise its temporary 16% voting rights in extraordinary general shareholders meetings. In all extraordinary general shareholders’ meetings the Romanian State, through the Ministry of Communications, has 65% voting rights while OTE has 35% voting rights. The extraordinary general shareholders’ meeting decides upon the pledging or mortgaging of any assets worth more than half the company’s book value, dissolution or liquidation, changing the object of the company, mergers, increasing or reducing the company’s share capital or amending the company’s statutes. The Romanian State as special shareholder also has veto power in matters affecting its national security interests”.

39 Cosmorom – a subsidiary of Romtelecom, offering mobile communications, founded in 1999 and operational in 2000; rebranded in 2005 as Cosmote.

40 Romtelecom (2000)
numbers 580,000 applications, down by 40% compared with the beginning of the period. The waiting time for having landline service installed, although still very long (2.7 years on the average), is markedly lower than the 3.7 years in 1998. Another operational indicator that shows a positive evolution is the number of phone lines/employee, which went up to 137 in 2002 from 74.2 in 1998.

**Corporate social responsibility**

For this period we did not find any documents or evidence showing concern for corporate social responsibility on the part of either Romtelecom or OTE; and no such information was found in any company report [R20].

**Strategic management**

Following Romtelecom’s privatization a new management team is appointed in February 1999 to lead Romtelecom, a team that "reflects the new ownership structure and the strategic partnership involved"\(^{41}\), with the medium-term mission to turn Romtelecom from a state-owned monopoly into a telecommunications provider capable to compete in a free market.

The business plan for 2000-2003, advanced in 2000 and geared to the new management team’s mission, has the following guidelines:

1. Reinforce Romtelecom's core business: fixed-line telephony
2. Enter rapidly the new growing markets of mobile telephony, Internet related services, cable television and others
3. Change the organizational culture.

Accompanying actions have in view both developing Romtelecom's strategic assets and reorganizing its businesses\(^{42}\).

Major action programs for key asset development are undertaken:

- Massive investments in infrastructure, particularly in network digitization, which impacts on the quality of services and also on the operating margins by reducing the number of employees (e.g., by replacing manual switchboards) from 45,000 in 2000 to 30,000 in 2003, and by lowering overall maintenance costs.
- Investments in developing the telephone network and increasing the speed of new line installation, with the objective of eliminating the waiting list by 2003.

\(^{41}\) Romtelecom (1999), p. 3
\(^{42}\) Romtelecom (1999)
long waiting list is a stimulus to new competitors to enter the market, which is detrimental to Romtelecom.

- Reconsidering the human resources strategy, which should give rise to a new organizational culture – customer and market oriented – with the belief that "changes in the organizational culture will lead to changes in structure, attitudes, and behaviors".

The business portfolio is reconsidered:

- Cosmorom is set up as a subsidiary in 1999 and is launched as a service in March 2000 to serve the Romanian mobile communications market. Cosmorom is to benefit from an input of competencies from Cosmote Mobile Telecommunications S.A. – the mobile telecommunications arm of OTE. Romtelecom is thus bracing itself to compete in the exploding mobile market of Romania and, at the same time, build the strategic advantage that could be derived from packaging fixed and mobile communications services.

- In 2001 Romtelecom splits from its partner in Global One Communications Romania to enter the local market on its own. It sets up ARTelecom as a subsidiary and makes it operational in 2002 (one year later than planned) as an Internet service provider.

- Romtelecom further develops Cable Vision of Romania as a company specialized in underground fiber optic cable installation and provider of cable TV service.

By following the strategic moves of the management team appointed in 1999 it is apparent that in 2003 Romtelecom becomes capable of offering integrated voice, data and TV services.

It is to be noted the similarity between Romtelecom’s strategic priorities outlined in the year 2000 and those made public in an OTE management report of the same year.

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43 Romtelecom (1999, p. 3)
44 Cosmote Mobile Telecommunications S.A., founded in 1998, is a wholly owned subsidiary of the OTE Group (OTE, 2011).
45 Global One Communications Romania was formed in 1993 as a joint venture between Romtelecom and the French company Transpac; Romtelecom’s interest was 49%. It was offering telecommunication equipment and services for data and voice transmission, and Internet connectivity. The Dutch company Global One Communications BV later acquired Transpac’s stock in the joint venture.
46 Cable Vision of Romania was founded in 1993 as a cable TV company. In 1998 Romtelecom becomes the majority shareholder, then divests it in 2005.
OTE’s strategic orientation came in response to the liberalization of the telecom market in Greece in the year 2000 and the withdrawal of the Greek State’s from the position of majority shareholder of OTE. The major objectives were:

1. Modernization of OTE’s national telecommunications infrastructure, enabling it to compete with the new players in the market
2. A search for new sources of income, to offset losses in income/profits sustained through competition in the main national market
3. A change in attitudes.

The year 2001 brings along the change of the top management team, whose goal is to speed up Romtelecom’s preparations for the forthcoming competition⁴⁸.

Although the main strategic goal remains unchanged (i.e., transforming the company into a group capable to compete in the free market), Romtelecom’s strategic directions are redefined and a new business plan for 2002-2006 is developed.

The change is called for, on the one hand, by the change in OTE Group's strategic priorities caused by the difficult situation of the global telecommunications industry and, on the other hand, by the difficult financial situation facing Romtelecom (at the consolidated level) in 2001.

To start with, in the year 2000 the Greek Group sets new guidelines for managing financial resources in foreign markets as follows:

– Reduce by $ 400 million the investments in fixed-line telephony in subsidiaries operating in foreign markets (including Romania) because of the unfavorable existing circumstances in those countries (small GDP, difficult economic conditions)

– Reduce operational costs of fixed-line telephony

– Prioritize investments in foreign subsidiaries operating in the mobile communications market, considering that those investments will return profit in a much shorter time.

Consequently, the new management team of Romtelecom sets the following strategic priorities:

– Restructure the core business, namely fixed-line telephony

⁴⁷ OTE (2000)
⁴⁸ The privatization of Romtelecom was accompanied by the Romanian State’s commitment to maintain Romtelecom’s monopoly for fixed-line telephony until January 1, 2003. After that date alternative providers of fixed-line phone service were free to enter the market.
– Speed up the diversification of the business portfolio, with special attention to mobile telephony
– Identify financing sources to support planned investments.

The ordinary general assembly of the shareholders, where OTE holds the majority, approves in November 2001 the new business plan for 2002-2006, but the approval is reversed in the extraordinary general assembly of the shareholders, where the Romanian State holds the majority, until March 2003.

This leads to the deepening of Romtelecom’s financial problems in 2002.

In a word, despite the commendable strategic intent, the beginning of 2003, the year of liberalization of the telecommunications market in Romania, finds Romtelecom far away from the strategic goal established at its privatization. [R1].

The end of 2002 finds Romtelecom in a tough financial situation; it is able, in theory only, to provide diversified telecommunications solutions since its subsidiaries have equally serious financial problems.

A major failure is Cosmorom, which experiences “cash-flow difficulties and investment stagnancy in its network development resulting in a limited subscriber base of 81,630 at the end of 2003”\(^49\). Cosmorom’s problems in 2003 compels the management of OTE and Romtelecom to assess the situation critically and to consider different scenarios for this company, from liquidation to relaunching; “the preferred alternative which must be explored as a priority, is the sale or merger of the total or part of its fixed assets to/with another company or investor.”\(^50\)

We are asking ourselves about the possible causes that brought Romtelecom in this situation. Unfortunately, during 2002-2003 Romtelecom did not issue annual reports, so, in order to find answers, we had to base our analysis exclusively on reports and data made available by the OTE Group and on media coverage.

It is a fact that during 1997-2003 the company underwent big changes, especially technological, supported through large investments in the network and switching equipment, which resulted in digitization, network expansion, improvement of service quality and reliability.

We also believe that, as proven by evolutions after the liberalization of the Romanian telecommunications market, the declared strategic aims were appropriate and demonstrated a good knowledge of the business environment. The trend in the

\(^{49}\) (OTE, 2003)  
\(^{50}\) ibidem
global telecommunications industry was, indeed, to turn telecom operators into providers of integrated solutions. In this regard, it is likely that Romtelecom’s management benefited from the OTE Group's expertise and experience.

So, in retrospect, if Romtelecom’s strategy had materialized:

– Developing Internet services through the ARTelecom arm could have raised barriers to the entry of competitors, which would have provided a major competitive advantage.

– Combining fixed-mobile services as of 2001 would have reinforced Romtelecom’s industry leadership, which would have become hard to offset by competitors offering mobile phone service. Failure to have done so opened the road for mobile telephony to erode the fixed-line voice market, which was the company’s mainstay.

– The Cable Vision of Romania subsidiary could have contributed substantially to countering the strategies of cable TV operators after 2003. It could have provided broadband Internet solutions of the last generation through the fiber optic infrastructure being developed.

The results, however, demonstrate the failure to implement the strategy, the top management team having been unable or unwilling to overcome the resistance to change within the company.

Corroborating the annual reports of the OTE Group and Romtelecom for 1999-2004 provides some interesting clues to the possible causes that led to strategy implementation failure [R2]:

– As we have previously noted, the strategy that Romtelecom’s management announced seems to have been developed so as to meet OTE’s requirements (or at least, in compliance with the OTE model), generating a situation in which the implementors of the strategy were not actually its true creators. As Faulkner and Bowman (2000) remark, it can be vital for the successful implementation of a strategy that its implementors are also its designers since the process of strategy development and adoption induces the sense of ownership of the strategy, which raises the responsibility and prospects for successful implementation. [R3].

– Romtelecom’s top executive team consisted of the CEO and C-level executives. It is possible that the members of this team, some originating from the old Romtelecom and the others from OTE, had different views of the company’s strengths, its future competitors, of the way and the pace at which the company
should be restructured, of what determines the company’s future competitiveness, as they had different backgrounds and cultures and possibly different agendas. This could have generated at least a lack of cohesion in how the management team acted, if not even cynicism and lack of commitment on the part of some members of the executive team and their subordinates. [R4].

– Given the company’s monopolistic history and the organizational culture originating in this history, there could have been a gap between the vision of the top management and the values underlying this vision, on the one hand, and the values and visions of the lower management levels in Romtelecom, on the other hand; consequently, it is likely that the executive team’s vision for the future of Romtelecom was not shared by the other employees. [R5].

– There is a factor that started transpiring beginning with 2001 from OTE Group and Romtelecom reports, namely a conflict between Romtelecom’s management and the Board of Directors. [R6]. This conflict originates in the way Romtelecom’s corporate governance was established in the Agreement between the Romanian State and OTE Group.

Thus, although OTE had the right to appoint the general manager (CEO) and held the majority of votes in the ordinary general assembly of the shareholders, the Romanian State controlled the Board of Directors and the extraordinary general assembly. Furthermore, the members of the top management team (except for the CEO) were appointed by the extraordinary general assembly, the Romanian State thereby has a say in determining the CEO’s team.

Consequently, in a crisis situation like the one in 2001, the differing views of the two parties could block decisions such as the adoption of the business plan in November of 2001, which contributed to the deepening of Romtelecom’s crisis. We believe that those disputes were present, more or less latently, over the entire period of analysis, but they surfaced when two important events concurred: Romtelecom’s financial crisis and the impending expiration of the Agreement between the OTE Group and the Romanian State.

We can get an idea about some of the issues over which the two poles of power in Romtelecom ownership held divergent opinions and about how they negatively affected Romtelecom’s transformation, by extracting information from the OTE Group’s annual report for 2001:
– Romtelecom’s prices had to be determined by a formula that the Romanian State devised, which was to be used for a three-year period from the date the company was acquired. However, as a result of the State’s indirect influence, prices were not increased to the level that would have resulted from the formula.

– Romtelecom was organized in 41 territorial units (county divisions), which counted as business units. OTE could not consolidate these divisions into a smaller number of regional centers, which would have significantly improved Romtelecom’s cost structure, as this would have required a decision of the extraordinary general assembly of the shareholders, where OTE held only 35% of the voting rights.

– In view of the serious cash flow difficulties that occurred in 2001, the ordinary general assembly of the shareholders approved on November 21, 2001 a business plan that called for, besides some hard restructuring measures, an increase in Romtelecom’s capital. Despite OTE’s strenuous efforts, the Romanian State did not go along with this capital increase and opposed it in the extraordinary general assembly, where OTE was in the minority.

– Both business plans, the first proposed at the time of acquisition and the next in November 2001, entailed significant borrowing for financing the planned investments. However, over the last three years of the analyzed period Romtelecom did not contract any substantial line of credit because the Romanian State, in its position of majority shareholder in the extraordinary general assembly, declined to pledge Romtelecom’s current assets or future revenues.

– The same business plan, which was approved by the ordinary general assembly in November 2001 but rejected by the extraordinary general assembly, called for a massive retrenchment of employees (over 30% – note ours), restructuring prices, implementing cost cutting procedures and clearly delineating management’s objectives and responsibilities. The plan went unapproved as it results from an OTE report published approx. September 2002.

We conclude the analysis of the 1997-2003 period by quoting a statement of OTE top management in the company report for 2002: “The liberalization of the telecommunications services in Romania took place on 1st January 2003 and ROMTELECOM is ready to face competition through the utilization of the existing

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51 According to company data this capital increase was approved only later, in March 2003.
52 OTE (2001)
53 OTE (2002)
infrastructure and the increase of the number of its subscribers. ROMTELECOM is not expected to face greater competition due to the fact the current environment does not facilitate significant investments." [R7].

We find this statement significant as it reflects some underlying assumptions of OTE management that can explain, on top of the factors discussed earlier, the delays in raising Romtelecom’s competitiveness; in addition, they will largely mark Romtelecom’s development over the next period.


Corporate governance

Along with the liberalization of the telecommunications market in Romania, the second stage of Romtelecom’s privatization takes place, after which OTE increases its ownership by cash contribution and by conversion of some of Romtelecom’s debt to OTE into shares of stock. Following the transaction, OTE becomes the majority shareholder with 54.01%, while the Romanian State, represented by the Ministry of Communications and Information Society, owns the balance.

The Romanian State intended to list 10% of the stock in a public offering in 2006, while OTE maintaining the same ownership. However, for various reasons, the offering did not take place to date.

Right after the Greek group gains control, significant changes are brought to the company’s constitution and corporate governance provisions with a view to "mitigating the national character of the company and transforming it into a purely private company; furthermore, negotiations take place with the newly created regulator (The National Regulatory Authority for Communications) in order to lay the foundation of a regulatory framework".55

Corporate finance; operational performance

The year 2003 marks not only the liberalization of the telecommunications market, but also the lowest revenue year Romtelecom has recorded over the entire period under analysis, mainly because of the delay in increasing prices.

54 Romtelecom’s monopoly in the fixed-line telephone market ended on January 1, 2003.
55 OTE (2002)
Nevertheless, the financial ratios and the operational performance indicators display a steady improvement over the following years. In 2005 the revenue reaches a level close to that of the last year when the company was the sole provider of fixed-line telephony, as shown in figure 4.2.2.1.

![Figure 4.2.2.1. Romtelecom revenue – 2002-2006 (in million EUR)](image)

Other performance indicators such as EBITDA and the number of phone lines/employee reach very good values. Thus, the company manages to attain the expected target of 300 phone lines/employee and bring the EBITDA margin to the level of the OTE Group (which amounts to 36.8 % in 2006).

The critical problem, however, particularly starting with the second half of 2005, is the massive loss of fixed-line subscribers; the company loses about 25% (almost 1 million) of its customers in two years (figure 4.2.2.2). Revenue begins to decline in 2006 (figure 4.2.2.1 below).

**Corporate social responsibility**

We found no official information from Romtelecom regarding social responsibility initiatives during this time period either. We did find, however, retrospective information in a subsequent report published by Romtelecom in 2007.

The social responsibility report for 2007 (the first report of its kind published by Romtelecom) mentions activities carried out over several prior years, which also cover the time period under analysis [R21]:

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56 EBITDA margin is equal to EBITDA divided by total revenue, usually shown as a percentage.
In 2007 Romtelecom celebrates six years since starting the partnership with the 'Child Helpline Association', materialized in significant accomplishments over the years. Child Helpline was set up to assist families and children in critical conditions, offering them, by a simple toll-free call, information and counseling, as well as financial or material support. Child Line also provides all necessary information for those who wish to adopt children or become foster parents.\(^{57}\)

We find even more information in the OTE Group social responsibility report for 2006\(^{58}\), which mentions that “in 2006, Romtelecom’s efforts were directed in three broad areas: values/culture, sports and the social/humanitarian fields, aiming to provide long-term benefits for the whole community.

Regarding the cultural area: “2006 was the seventh year in a row when Romtelecom proudly joined the most prestigious media event, organized by the Romanian Press Club, which rewards journalists and encourages them in building a professional and independent approach.”

In the area of sports, “Romtelecom was the official partner of the Romanian Olympic Committee, thus continuing a tradition which will extend until 2008”.

In terms of social initiatives, “Romtelecom supports the activities of the Association for Child Protection to promote children’s rights in Romania and offers a free ‘Green Phone Line’ to help families and persons with special needs, through counseling and guidance. Over 15,000 cases were solved with the support of the

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\(^{57}\) RSC Romtelecom (2007)

\(^{58}\) CRR OTE (2006)
Green Line provided by Romtelecom in the past years. Regarding children’s issues, the company also gave support, among others, to the Association for Autistic Children, to the hearing deficiency school. Romtelecom also continued the collaboration with ‘Healthy Children’ Foundation, which develops a successful campaign for helping the future mothers and newborn children who suffer from various congenital affections. In 2006, the company continued supporting the Program of Discovering and Preventing Breast Cancer, launched by Renasterea Foundation, by financially sustaining its activities and offering the first free call service in Romania (Pink Line) dedicated to this matter”. [R22].

As for the environmental area, the same report states: “For Romtelecom, 2006 was the second year of sustaining the ecological project ‘Save the Danube Delta’ developed by the Association ‘Save the Danube Delta-Catavencu Academy’, through collecting and recycling waste from this unique natural habitat in Europe”. [R23].

As we will see later, when we analyze the period of 2006-2011, many of these initiatives continue in subsequent years.

**Strategic management**

Right after acquiring the majority stake in 2003, OTE Group appoints a new team to lead Romtelecom and takes measures to strengthen the authority of this decision center.

Before reviewing the objectives of this new team, it is useful to run through the strategic directions that the management of OTE outlines for the Group’s business units, as written in the annual report for 2002[^59]:

- Competitiveness in fixed-line telephony
- Growth in mobile telephony and the Internet
- Restructuring of international activities
- Effectiveness in financial performance, at Group level.

The section on international activities details the strategic directions for 2003 per business unit; the mandate of the Romanian division is: “Acceleration of Romtelecom restructuring: strengthening of the management team, personnel reduction, and restriction of investments.”[^60]

[^59]: OTE (2002)
[^60]: ibidem
It is clear then that the mandate of the new management team is targeted at rebalancing corporate finance. This goal also transpires from the composition of the top team, which consists of professionals experienced in restructuring telecommunication firms, particularly the new CEO – the American James Hubley\(^{61}\) – with a vast international experience, including in Eastern Europe.

Right after being appointed, Romtelecom’s management redefines and makes public (to the best of our knowledge, for the first time in Romtelecom’s history) the corporate values, vision and mission (Appendix R.2). [R8].

In line with these general guidelines, Romtelecom’s management proposes in June 2003 a business plan (called the Transformation Plan\(^{62}\)) that sets three strategic objectives for the Company for 2003-2007:

- Cost minimization
- Raising service quality
- Improving customer relations.

The broad strategic actions aimed at achieving the objectives are: "changing the organizational culture, modernizing the management of business operations, maintaining market position, and focusing investments."\(^{63}\)

As for strategy implementation, it is worth noting that the management team does not intend to innovate in its restructuring efforts, but rather address Romtelecom’s transformation through approaches and systems previously verified and proven effective, adapted to the local context as needed\(^{64}\).

This provides a clue not only to the team’s pragmatism, but especially to the shareholders’ pressure for a transformation that is not just effective and efficient but also fast.

The implementation of the strategy, supported by an ample effort over the following three years, turns out successfully if we are to judge by how the values of the efficiency ratios assumed by the Transformation Plan were achieved over the period of 2004-2005 (a 40% EBIDTA margin, 300 phone lines/employee and halting the drop in revenue). [R18].

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\(^{61}\) James Stuart Hubley, CEO of Romtelecom, 2003-2007

\(^{62}\) Romtelecom (2004)

\(^{63}\) Romtelecom (2004)

\(^{64}\) Romtelecom (2004)
However, the objective that was not achieved, although it is essential, is improving customer relations – which we believe is one cause of the massive loss of customers in 2005 and 2006.

Romtelecom’s management applies the principle “structure follows strategy” and adopts a radical change in company structure: in place of the 41 county divisions 10 business units are organized at the beginning, which are then reduced to 7. The business units offer a wide array of products and services geared to well-defined geographic spaces. It is important to note that although business units do not enjoy operating independence or autonomy, they were delegated a great deal of decision making related to the ways to achieve their business objectives.

Internal processes are redesigned, and new policies, procedures and practices are implemented.

Since the management considers the implementation of information systems and associated infrastructure as crucial for Romtelecom’s successful restructuring and modernizing, it places a high priority on the information technology strategy. The original 41 information systems are consolidated into a centralized structure, "with a unique set of priorities". About 380 local support systems are abolished and replaced with centralized IT solutions.

As previously noted, 2004 is the first year when company leadership formulates the corporate values, vision and mission.

The human resources strategy is given an important role in implementing the Transformation Plan. Efforts are made to guide the change in organizational culture in accordance with the adopted corporate values. For instance, the performance management system (implemented first at the level of management) is designed so that the annual evaluation of the staff is aligned with behavioral metrics that are in tune with corporate values [R9]. The intranet page dedicated to the performance management system states that: "Institutionalizing and making corporate values permanent are an essential prerequisite for the continuous progress and require hard work and sustained advocacy." Prior to implementing the system the human resources department held meetings to familiarize employees with each value, step

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65 Chandler (1962)  
by step, and with the outcome of acting accordingly; the associated behavioral metrics were also introduced.

An important strategic decision that marks the way Romtelecom will operate its businesses in the future is taken at the end of 2004 and implemented in 2005. Top management recommends the restructuring of the three Romtelecom’s subsidiaries because, in the existing structure, they do not contribute to "the financial health of Romtelecom". Following approval of this recommendation, ARTelecom (an Internet service provider) is merged into Romtelecom, Cable Vision of Romania (a fiber optic network and cable TV company) is sold, and Cosmorom (a mobile phone service provider) is reorganized together with a strategic partner. Thus, Cosmote Mobile Telecommunications S.A. (OTE subsidiary) and Romtelecom agree to the increase of the former’s participation in the share capital of Cosmorom. Accordingly, Romtelecom sells to Cosmote Mobile Telecommunications S.A. 70% of Cosmorom’s stock and retains ownership of the remaining 30%. Cosmorom is then re-launched in the Romanian market in May 2005, under the name of Cosmote Romania Mobile Telecommunications S.A.

Through the strategic moves presented above Romtelecom takes the first step to becoming an integrated voice and data services provider – in fact, it will launch its broadband Internet service in May 2005, using ADSL technology. We also observe that Romtelecom gives up the "telecommunications group" type of organizational structure, most likely borrowed from OTE, and decides to enter growing market segments on its own. This strategic decision signals the direction in which Romtelecom intends to develop further – broadband Internet services, which can bring an advantage in the competition with the mobile phone companies.

At the time Romtelecom also decided to exit the cable TV industry. As shown earlier, the new management team succeeds in carrying out almost all major actions of its strategy, failing, nevertheless, to "maintain market position".

Starting in mid-2005 Romtelecom loses market share at a significant rate, continuing in 2006. This process is all the more clear if we examine the evolution in the number of Romtelecom subscribers during 1998-2007, as illustrated in figure 4.2.2.4.

67 Romtelecom (2004, p. 27)
68 As it will be seen in what follows, Romtelecom reconsiders the decision to stop supplying television programming by launching in November 2006 the Dolce digital satellite TV service, considered successful in the DTH (Direct To Home) segment. And later, starting in 2013, it will resume providing also cable TV service.
Therefore, by mid-2006 an imperious necessity for change in the strategic approach is felt. This leads us into the next period of analysis.

4.2.3. The Customer First period: 2006-2011

Corporate governance

There are no major changes in this time period in Romtelecom ownership. The public offering by the government of 10% of the share capital, planned for 2006, did not happen, as mentioned earlier.

An important event, however, which takes place gradually until 2011 and will impact upon Romtelecom as well, is the acquisition of 40% of OTE’s share capital by Deutsche Telekom A.G.⁶⁹ As it became the main shareholder of the OTE Group, Deutche Telekom undertook the management of the Group⁷⁰.

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⁶⁹ In 2015 Deutsche Telekom was the leading European telecommunications company with sales of EUR 69.2 billion.
⁷⁰ OTE (2011)
After 2005 the company’s revenue drops mainly because of the massive loss of customers, mainly fixed-line subscribers. In three years (2004-2007) it loses 30% of its subscribers, which means over 1,300,000 (figure 4.2.3.1). The rate of revenue decline (figure 4.2.3.2) is, nevertheless, smaller owing to new sources of revenue from growing market segments, such as Internet services and satellite television (details will be given below in the “Strategic management” section). It is significant that both the revenue and the number of subscribers stabilize in 2008 because of the spectacular growth in the number of subscribers to broadband Internet (ADSL) services and satellite television (DTH), as shown in figure 4.2.3.3.
The EBITDA margin is declining, though, reaching 29% in 2008 because of the high promotion expenses incurred in 2007 and particularly on account of the costs with the equipment installed in subscribers’ homes. By contrast, the number of subscribers/employee rises to reach again 300 in 2008.

### Corporate social responsibility

In 2007 and 2008 it is for the first time in its history that Romtelecom publishes CSR reports; then, the CSR activities are included as part of the company

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71 As part of Internet and TV subscription contracts Romtelecom provides its customers, for free or for rent, the required equipment: modems and set-top boxes.
report for 2009\textsuperscript{72}. [R24]. Starting with 2010, though, Romtelecom suspends publishing information on its CSR activities. [R25].

A similar story is true about OTE’s reporting on Romtelecom’s involvement in CSR: OTE reports on corporate responsibility for 2006 and 2007 do make reference to Romtelecom’s own actions, but the subsequent OTE reports for 2008-2011 contain scant information or not at all\textsuperscript{73}. [R26].

From the already referenced and other sources\textsuperscript{74} we could gather that Romtelecom’s CSR initiatives were oriented in principal toward building and preserving the image of a good corporate citizen, with programs running under these categories: support for young people, protection of children, sports, protection of the environment, and building values and promoting social goals.

Excerpts from those reports are reproduced below as examples [R27]:

- Supporting the young people: Romtelecom, along with COSMOTE and OTE, offered three scholarships to three students from Greece, Albania and Romania to study in the Dimitris Perrotis College of the American Farm School, thus contributing to the achievement of the College’s goals to create leaders for a viable economy in South Eastern Europe.

- Child protection: Romtelecom continued its collaboration with the “Child Helpline Association”. Child Helpline was created to support the families and children who are in a critical condition. Romtelecom supported it by offering the toll free phone number 116.111\textsuperscript{75}. The Helpline service provides information and advice, as well as financial and material support. In 2008, for example, more than 600 cases of abuse were handled through Helpline and approximately 1.5 million calls were made regarding different child abuse cases.

Furthermore, Romtelecom supported the “Healthy Children” foundation in its effort to purchase new equipment for a children’s hospital in Bucharest. Similarly, Romtelecom initiated a campaign for pregnant women and newborn children suffering from different birth disabilities.

\textsuperscript{72} Romtelecom (2010)
\textsuperscript{73} CRR OTE (2008), CRR OTE (2009), CRR OTE (2010), CRR OTE (2011),
\textsuperscript{75} This phone number is in line with the European Commission’s decision of 2007 requiring Member States to reserve all six-digit telephone numbers starting with 116 for services of social value.
– Sports: Romtelecom continued its support for the Romanian Olympic Committee. As an example, Romtelecom developed in 2008 “Beijing 2008 Olympic Games” program jointly with Hotnews. This portal hosted an information campaign on Romtelecom’s commitment to Romania’s values and to supporting the Romanian team’s participation in the games, as well as a file with pictures of famous Romanian Olympic athletes.

– Protection of the environment: Romtelecom continued to support the environmental programs developed by “Save Danube Delta”, which is one of the most environmentally active NGOs in Romania. A good example of collaboration is the “Adopt a River” program, which was also supported by the National Administration of Romanian Waters. The program was selected by the company’s employees from a list of several CSR projects considered by the company [R28]. Employees participated in cleaning four areas along the Olt river, when more than 25 tons of trash were collected [R29]. Another program developed in 2008 was “We Want a Clean Romania”, by which Romtelecom aimed at raising public awareness toward the environment and contributing to environmental protection.

– Values and social goals: in 2007 and 2008 Romtelecom continued to support one of the most important mass media events organized by the Romanian Press Union, namely the “Romanian Press Club Gala”, which awards prizes recognizing the best journalists who contribute to the freedom of the press. Another ongoing project supported by the company was the prevention and treatment of cancer in women, developed by Renasterea Foundation. More than 2,000 women, from 10 towns in Romania, benefited from free breast and cervical cancer tests76.

– In December 2008, Romtelecom began a campaign against stress. With “Stress is prohibited” as its motto, an anti-stress group went to Bucharest to try to offer moments of relaxation to hasty and stressed passersby. A website was developed: http://www.antistresu.ro/home.html, which gives, primarily to office workers, the opportunity to manage their stress; more than 20,000 people visited it during a period of one month.77

Although, as previously mentioned, we have very little data on Romtelecom’s CSR projects during 2009-2011 we believe that we can extrapolate the CSR activities described above over the entire period of analysis of 2006-2011. Indeed,

76 CRR OTE (2008)
77 ibidem
later OTE CSR reports, for 2012 and 2013\textsuperscript{78}, make reference to the same directions of action as seen earlier (supporting the young people, child protection, sports, protection of the environment, values and social goals) and the same range of activities. We believe, therefore, that is is reasonable to conclude that Romtelecom has preserved its lines of commitment and its CSR activities [R30].

*Strategic management*

As indicated in the analysis of the previous time period, 2006 is the year when the fall in Romtelecom’s customer base and loss of market share become significant. Annual reports\textsuperscript{79} indicate that, both the management of Romtelecom and OTE understand, as of the end of the first quarter of 2006, the critical importance for company survival of stopping the loss of customers in spite of the considerably improved financial and operating results.

As a response, in 2006 Romtelecom focuses on expanding the broadband Internet access services by providing innovative solutions and also by offering voice-Internet packages (double play). The efforts have tangible results as the number of customers in this segment grows. But the increase in the broadband Internet access segment (in both the residential and business sector) is not enough to make up for the heavy loss of fixed telephony customers.

That is why at the end of 2006 a strategic move is implemented, which took by surprise many market players: the commercial launch of the Dolce TV service via satellite (DTH). The success of this move will contribute greatly to the acceleration of Romtelecom’s repositioning as “a technology and media provider, which is breaking away from the fixed-line provider business model”\textsuperscript{80}.

As we believe this strategic move is highly important for the recent history of Romtelecom we will dwell some more upon this decision. Later, some competitors such as Orange or UPC appreciated it themselves as one of the best strategic maneuvers the fixed telephony giant could make.

In this context, we observe how the development of the Romanian telecommunications market, considered one of the toughest, marks not only Romtelecom's strategy but also its formation. If at the beginning of our analysis we

\textsuperscript{78} CRR OTE (2012), CRR OTE (2013)
\textsuperscript{79} Romtelecom (2006), OTE (2006)
\textsuperscript{80} OTE (2013)
found that Romtelecom’s strategy had almost the same priorities as OTE’s (the markets of the two companies bearing many more similarities than differences), the market context will make it necessary for Romtelecom’s strategy to be adapted to local conditions, the local factors increasingly affecting its nature. Thus, while the decision to enter the broadband Internet market and focus investments and commercial efforts toward expanding this business can certainly be traced back to OTE management’s vision of the trends in fixed telephony, Romtelecom’s re-entering the TV services market is definitely a strategic move called for by the specifics of the Romanian market.

The subsequent statement by Romtelecom’s CEO, Yorgos Yoaniddis, backs up our observation: “...in the current market conditions, in order to be able to fulfill its vision, Romtelecom must become more than a voice and data services provider. The company must become a market leader in providing multimedia content and data solutions for business.”

It is also true, however, that an important factor for the success of the TV services offer was the company’s affiliation with OTE, which produced the synergy between two of the OTE’s subsidiaries: Romtelecom and HellasSat Greece, the OTE Group’s provider of satellite telecommunications. The synergistic use of the competencies of the two operators allowed Romtelecom to enter the Romanian market quickly and with highly competitive prices.

The year 2007 brings a new top management team led by Yorgos Ioannidis, who announces almost immediately a new market orientation policy called "Customer First". This becomes the core of Romtelecom’s strategy aimed at fulfilling the revised company mission, reformulated in the early 2008 as: “Providing promptly telecommunications and entertainment services of constantly growing quality” (Appendix R.3). An accompanying business plan is produced.

Figure 4.2.3.4 presents the main thrusts of the business plan, which was structured around three strategic priorities:

- Redefining the relationship with the customers and with the business environment
- Increasing operational efficiency

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81 OTE (2006); OTE (2007)
82 Romtelecom (2006)
83 Yorgos Ioannidis, CEO of Romtelcom, 2007-2011
– Giving high priority to the growing market segments: broadband Internet, television and corporate ICT\textsuperscript{84} services.

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{figure4234.png}
\caption{Graphical representation of Romtelecom’s business plan for 2008-2011}
\end{figure}

The implementation of the strategy will take place through substantial changes in both the company structure and its processes. These changes are aimed at: orienting decidedly the company toward the customer, reducing time to market and, implicitly, speeding up the reaction to market moves and to changes in customer preferences, and improving operational efficiency.

Thus, the company is reorganized so as to better meet market demands:

– two separate business units are created for the two segments: commercial customers and residential customers\textsuperscript{85}, and

– distinct call centers are dedicated to residential and commercial customers, on the one hand, and to customer retention (aimed mainly at identifying and satisfying customer claims or complaints) on the other hand.

\begin{footnote}{The term Information and communications technology (ICT) is an extension of the term Information technology (IT). It defines integrated networks of telephony, computers and the necessary software and audio-video systems which enable users to access, store, process and transfer information.}
\end{footnote}

\begin{footnote}{Romtelecom (2008)}
\end{footnote}
The processes and procedures are simplified in order to meet customer needs as quickly as possible; for example, procedures are implemented that enable the customer to obtain a new contract or additional services by simply making an application by phone.

This is the first period of analysis in this case study in which exceptional emphasis is put on an organizational culture change as well as on revising the internal communication and the managerial methods in use.

This endeavor is not accidental as it originates in the way the management perceives the importance of the human capital and organizational culture. Here is what Yorgos Ioannidis, the CEO, had to tell a meeting of the people directly involved in the organizational culture change project: "What is there in a company that is impossible to imitate? Nearly anything can be copied: products, prices, marketing ideas, the production line, procedures ... basically everything a company does. But the essence of what defines a company cannot be duplicated and gives it uniqueness. And one of the traits of a company is its organizational culture. Therefore, it is not surprising that developing a strong organizational culture, which should create that uniqueness which distinguishes our company in the market, has become one of our strategic priorities" [86].

The organizational culture change project

An excerpt from a study on employee loyalty, made by an external consultant in 2007, shows: "The work environment at Romtelecom, as seen by its employees, is below all European standards in terms of the fundamental dimensions underlying the company-employee relationship: credibility, respect, team spirit, objectivity. [R11]. With regard to the pride of being a Romtelecom employee, it was found to be close to the highest levels in Europe" [87].

Romtelecom’s management does not stop here and, in 2009, with the help of external consultants makes two extensive evaluations of Romtelecom’s organizational culture. The correlated results of the two studies lead to the identification of the main problems in this area, which affect the effectiveness and

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86 Based on one of the authors’ personal notes from the meeting of the CEO with the "Organizational culture ambassadors" team (July 15, 2010).
87 Employee Survey (2007), Romtelecom internal document
efficiency of corporate activity. They also point to the directions of organizational culture change.

We list below the most important shortcomings revealed by the studies [R12]:
– a high degree of internal competition – which hinders collaboration and affects efficiency adversely,
– inter- and intra-departmental misalignments – which negatively affect the efficiency and the capability of responding to stimuli from outside the organization,
– the management makes the decisions, while people take no responsibility or feel they are not trusted with decision-making,
– resistance to new ideas and initiatives,
– individualism and a lack of interdepartmental collaboration and communication,
– a lack of an all-encompassing perspective of the processes. [R13].

The conclusions of the studies spur the effort of the top management to embark on an organizational culture change project. The reason for this project is given in a company report as follows: "The top management team discussed and analyzed the results with a view to building an organizational culture that supports the company's strategic intent, and to identifying the priorities and levers of the change process. At the same time organizational values have been reviewed and enriched for a better alignment with the guiding principles of the new shareholder (Deutsche Telekom – note ours)".

A comprehensive program carried out during 2009-2011 is "Organizational culture ambassadors". [R14]. Team members who participate in the program are selected from across the entire organization, on a voluntary basis, through an announcement distributed by all internal communication channels. The announcement only mentions the opportunity for personal development, without giving details on the program. Volunteers are then selected based on their public and interpersonal communication skills and the level of the alignment of their personal values with Romtelecom values. The selected team (around 40 people) goes through an intensive training in areas such as organizational culture, public communication, acquiring training skills, etc. Starting in 2010 the team holds

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88 Romtelecom (2010)
workshops all through the organization, during which the organizational values are identified together with the participants, discussed and debated with them. [R15].

Throughout 2010 over 160 meetings were held in which over 5,000 employees participated.

At the same time a department dedicated to non-technical training is created, designed to deliver soft skills, leadership and team development training. Topics such as "Team management", "Communication", "Coaching and feedback", "Change management" are covered. The fact that a Romtelecom manager gets to participate in 6-7 training sessions per year demonstrates the intensity of the program. [R16].

Systems that support the change in organizational culture and in performance assessment are implemented. The performance management system is redesigned so as to help transform the organizational culture in a "performance-based and customer-oriented" culture and ensure that corporate performance and individual performance are connected.

By 2011 the performance management system is implemented on the intranet, including a personal development section by which an employee, together with his/her manager, proposes the areas of personal development that need building up. Based on the data thus collected the HR department designs and conducts employee-training programs in the following year.

Major changes take place in order to improve internal communication [R17] by: expanding the intranet throughout the organization, implementing chat service on the intranet, launching and publishing a monthly internal bulletin, and launching the Romtelepedia, where employees can find, request or add particular information and/or information of general interest on events or activities that take place in Romtelecom. An e-learning platform for internal use is also developed.

Romtelecom also brings change to its market orientation policy by launching attractive, innovative offers: Internet service packages, which include a PC or laptop, triple play bundles and, toward the end of the analyzed period, preparing quadruple play packages by putting to use the partnership with Cosmote Romania with a view to further adding Internet Protocol Television (IPTV) service.

According to data provided by the company, the implementation of the business plan and the "Customer First" program has resulted in a speedy growth in

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89 Romtelecom (2008)
several market segments: broadband Internet access, television and commercial business services, and in a significantly slowed down the loss of fixed-line telephony customers.

Developments at Romtelecom after 2011

Although the time span of the case study ends in 2011 it is useful to add a brief presentation of subsequent events.

The market conditions produced by the economic crisis and particularly the changes in the OTE Group ownership have significantly influenced Romtelecom’s further development.

As already noted above, in 2011 Deutsche Telekom reaches to 40% ownership of OTE, thus becoming the main shareholder of the Greek telecom Group\(^90\). Deutsche Telekom was at the time one of the world’s leading integrated telecommunications companies, having as the strategic intent “to become the leading European telecommunications provider”\(^91\).

The management of Deutsche Telekom believes that: “customers choose telecommunications providers with high-performance networks, particularly in light of the rapid growth in data volumes. A strong network is also the decisive factor for online service providers looking for a high-quality technical platform for their products that allows them to set up their own services quickly and easily. As a result, integrated telecommunications providers are generally in a better position than fixed-only or mobile-only providers”\(^92\). The business model adopted by Deutsche Telekom, based on the fixed-mobile communications synergy, marked the development of OTE and its subsidiaries as of 2012.

Along these lines, Romtelecom and Cosmote Romania “are moving closer to each other, and Romtelecom benefits from the synergies brought by a common telecommunications network with the OTE Group’s mobile arm in Romania”. At the same time, “talks are underway between OTE and the Romanian government, regarding the merger of the two companies”\(^93\).

OTE 2013 annual report writes about continuing the fixed-mobile integration: “This means in practice that instead of having different units for fixed and mobile

\(^90\) OTE (2011)  
\(^91\) http://www.telekom.com/company/big-picture-strategy/94158  
\(^92\) ibidem  
\(^93\) OTE (2011)
telecommunications, operations are integrated under the same organizational structure. In this way, synergies are maximized, increasing the companies’ competitiveness (through exploitation of commercial opportunities, better customer experience, optimum network design etc.) and improving the companies’ internal functioning (by adopting common planning and harmonizing procedures, exploiting economies of scale, establishing best practices, etc.).”\textsuperscript{94} Such a move is helped by the ownership structure of OTE’s subsidiaries (see Appendix R.4).

Following this logic, at the beginning of 2013 the operational integration of Romtelecom S.A. and Cosmote Romania is launched and synergies that would benefit both entities are identified. Advisors were appointed for the assessment of benefits and the preparation of the legal merger. As of April 1, 2013 Nikolai Beckers was appointed CEO of both Romtelecom and Cosmote Romania with the mandate to create the No.1 complete telecom and entertainment provider in the Romanian market. Starting on August 1, 2013, five new management positions were created to jointly coordinate Romtelecom and Cosmote Romania activities, in order to streamline business processes, increase operational efficiency and maximize market impact. By October 1 the entire Executive Team had assumed joint responsibilities, continuing the integration process\textsuperscript{95}.

Furthermore, at the beginning of 2014 Romtelecom’s Board of Directors decides to rebrand the company under a Deutsche Telekom brand. As of September 2014 Romtelecom S.A. changes its name to Telekom Romania Communications S.A. and operates under the Telekom Romania brand. Telekom Romania becomes an umbrella telecommunications brand under which Telekom Romania Communications S.A. provides fixed-line services and Telekom Romania Mobile Communications S.A. (previously Cosmote Romanian Mobile Telecommunications S.A.) offers mobile services.

\textbf{4.2.4. A summary of Romtelecom’s evolution during 1997-2011, and conclusions}

We remind the reader that, in the analysis hereunder, we will invoke prior facts and findings by using references in the format [Rx] along with the corresponding page in the book.

\textsuperscript{94} OTE (2013)

\textsuperscript{95} Ibidem
The Investment-Based Strategy period: 1997-2003 (covered in section 4.2.1)

That period is marked by the failure to implement the strategic goals [R1, p. 140] set in the two change plans developed by Romtelecom management during that time interval.

By considering the analysis we made [R2, p. 141] we can conclude that two of the reasons underlying the failure were the mental models of the managers and the presumed lack of a shared vision both at the management level and throughout the company.

As regards the mental models, one of the identified aspects [R7, p. 144] clearly indicates that senior management believed that the liberalization of the market could not really affect the company in the short run because the time when competition would become a threat is far in the future. They were probably relying on the barrier to entry raised by the capital-intensive nature of the industry. A would-be competitor would have to make major investments in order to be on par with Romtelecom, which was seen as highly unlikely because of the tough economic times.

As far as the lack of shared vision is concerned, several factors contributed to this and to the failure of reaching the strategic goals:

– a strategy that OTE probably imposed on Romtelecom [R3, p. 141],
– differing paradigms and visions for Romtelecom within the top executive team [R4, p. 142],
– an organizational culture indicative of an organization consistent with the O-I organizational model, with limited learning (section 2.1.1.5), while a learning organization is radically different (section 2.2), and
– last but not least the non-convergent interests of the main stakeholders (shareholders, employees, managers and the National Regulatory Authority for Communications) [R5, p. 142] [R6, p. 142], which caused dissension among them.

The negative effects of the disputes between Romtelecom’s corporate executives and the Board of Directors during 1998-2002 (which reflected, more or less overtly, the differences between the two poles of power in Romtelecom ownership – the Romanian State and OTE Group), as well as the impact the market regulation decisions taken by the National Regulatory Authority for Communications
had on Romtelecom’s development, stress the importance of the dynamic capabilities (Smith, 1999) of the learning organization for business sustainability.

The dynamic capabilities were discussed in section 2.2.3.5 and represent the organizational ability to learn, change, adapt and renew over time. They are exercised amid tension created between the need of an organization to operate on a steady basis, on the one hand, and the need for fundamental organizational transformation over time (which is a need induced by the operating environment), on the other hand. The quality of the dynamic capabilities is shaped by factors such as the balance of forces at work inside and outside an organization, political maneuvers and the ethics of management behavior (Smith, 1993).

In our case study both the balance of forces (examined in the section on “Strategic management”) and the resistance to change (most likely manifested by many employees and managers at all organizational levels, for whom the risk of losing one’s position or job altogether in the forthcoming company restructuring appeared much closer, predictable and tangible96 than the threat to company competitiveness in a market to be liberalized some time in the future) seem to have strongly shaped the dynamic capabilities.

Obviously, also for the Romanian State, a key shareholder of Romtelecom, the social costs of restructuring Romtelecom could have appeared excessively high.

As for CSR activities, we did not find any documents or evidence to attest to corporate concerns for social and environmental problems during this time period [R20, p. 137].

The Financial Recovery period: 2003-2006 (covered in section 4.2.2)

In our opinion, even after the ineluctable liberalization of the telecommunications market and the loss of monopoly in fixed telephony happened in 2003, Romtelecom management continued to focus largely on processes of transformation and operational efficiency boosting which are very much based on single-loop learning processes, thus creating a situation similar to that described by Smith and Saint-Onge (1996): “even as the business is sinking the emphasis is on the best way to re-arrange the deckchairs”.

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96 A simple calculation shows the magnitude of reorganizing necessary in 3-4 years: in 1998 the company operated 3,600,000 phone lines with 45,000 employees; bringing Romtelecom to a competitive level, i.e., around 300 lines/employee, entailed firing over 30,000 employees, namely over 2/3.
The situation in which Romtelecom was brought late in 2005 and at the beginning of 2006 was to be expected. Although the transformation carried out was successful (in terms of the efficiency objectives of the Transformation Plan), which made Romtelecom more stable financially and operationally more efficient than ever before [R18, p. 148], the company was driven by a strategy disarticulated from market realities, the mismatch worsening because of the extremely rapid development of the market, which lead Romtelecom into a critical situation.

So, costs were cut and quality service was improved and yet the company was incurring a massive loss of customers [R19, p. 150] mainly because the fixed voice service, which was bringing in 90% of the revenue, was losing customer value, was more and more becoming a commodity and had, thus, to compete increasingly on price.

An analysis of the described situation reveals that the reason lies, on the one hand, in the type of learning the company has been promoting (the significant pressure for operational efficiency encouraged adaptive, single-loop learning) and, on the other hand, in the management’s failure to capture and use the knowledge generated by organizational learning.

Saint-Onge and Armstrong (2004) argue that generating and sharing knowledge across an organization makes sense only if it creates value at the customer interface – with benefits for both customers and the organization. It is right in this aspect that things went wrong with Romtelecom: during 2003-2006 the learning processes were not directed toward guiding the organization to adapt to changes in customer preferences, which would have created customer value. The proof is the fact that customers were increasingly opting for the services of other operators, starting in 2005 [R19, p. 150].

Our conclusion about the developments in Romtelecom is supported by an internal study97 carried out by one of the authors of this book in late 2007 and early 2008, before the new management team appointed in 2007 introduced its changes. The study was done in a Romtelecom organizational unit, which we will call “Department”, and had the objective of assessing to what extent the characteristics

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97 For reasons of confidentiality, we can only publish a partial analysis of the study results, limiting ourselves to what is of interest to the present book.
of a learning organization were present in that Department. The purpose was to use the findings to improve the Department’s performance.

The study included 68 persons, working in 7 formal groups in the Department, whose activities were at the interface with customers. It was conducted with the help of a survey instrument developed by Garvin, Edmondson and Gino (2008), which enables the assessment of organizational specifics against a framework consisting of the three building blocks of a learning organization (the theoretical model of the instrument was presented in section 2.2.3.2). Furthermore, this assessment tool comes with the facility of making comparisons between our organization and others, and against a benchmark derived from surveys of over 200 international companies in a variety of industries, whose managers completed management development programs at Harvard Business School.

The results were submitted to the Department. They contain composite scores associated with each of the three building blocks of the model and also scores for the subdimensions. The scores were provided both in absolute terms and relative to the benchmark based on the companies surveyed in the HBR database. Figure 4.2.4.1 shows the scores of the Department plotted against the benchmark.

![Learning Organization Scores Summary](image)

**Figure 4.2.4.1. Composite scores per building block**

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98 Harvard Business Review made the questionnaires of the assessment tool available online, free of charge.
We note that the Department scored worst relative to the *Learning processes and practices*, falling well below the benchmark median, while the *Learning environment* was assessed highly by employees, thus placing the Department way over the benchmark. We also note the relatively poor score, below the median, for the dimension that shows the extent to which managers support learning (*Leadership that reinforces learning*). It follows that, although the environment supports learning (i.e., openness to new ideas, psychological safety, etc.), learning processes suffer because systems and practices (such as education and training, information collection and analysis) are poorly developed and managers do not capitalize enough on the favorable learning environment through catalytic interventions.

We present below, in figure 4.2.4.2, the scores obtained for each subdimension of the *Learning processes and practices* building block, which offer relevant details.

![Concrete Learning Processes and Practices](image)

**Figure 4.2.4.2. Scores for the subdimensions of the “Concrete learning processes and practices” block**

The scores worth commenting on are the ones obtained for *Information collection* and *Information transfer*, which are well below the median. Since
interviewees were working at the customer interface the scores reveal that the Department did not have formalized systems or procedures for collecting information from customers and for disseminating and interpreting it in the company.

We list below the activities of the Department covered by the questionnaire used to examine the Information transfer in order to understand better the poor score for this subdimension (which shows the way information is disseminated in the organization):

- This Department or its members participate in forums where they meet with:
  - experts from other departments, teams or divisions,
  - experts from outside the organization,
  - customers,
  - suppliers.

- This Department or its members exchange/share acquired information with networks of experts in the company.

- This Department or its members exchange/share acquired information with networks of experts outside the company.

- This Department communicates quickly and accurately newly acquired knowledge to key decision makers.

To conclude, the results of our study confirm the theoretical considerations (on organizational learning) discussed in section 2.1, according to which the mere existence of a proper learning environment does not automatically generate learning processes. Rather, it is necessary to consciously generate and maintain learning processes at the level of groups in the organization by creating learning opportunities and systems.

Obviously, we do not have grounds to generalize to the entire company the results we obtained for the Department, but the findings offer clues about the poor collection methods and the wrong use of the possible outcomes of the learning processes, in large areas of the company. More often than not knowledge remained in the group that generated it. Our findings also indicate a possible rift between the activities at the customer interface and the upper echelons of the company.

Another reason for the loss of a large number of customers, which is not unrelated to the issues in the discussion above, can be the lack of an actual
customer orientation in Romtelecom. Although business plans drawn during this period of analysis target the change in organizational culture as a key strategic outcome, few efforts were made to change the culture of a company that has been, for most of its existence, a monopoly. Therefore, it is reasonable to assume the existence of a poor customer-oriented organizational culture.

We have seen that it was for the first time in the analyzed history (in 2004) that management has defined and disseminated the corporate values, vision and mission [R8, p. 148]. It also started developing systems that were aligned with corporate values such as the performance management system [R9, p. 149]. That drive was, however, at its beginnings as the system was only applied to managers.

Moreover, corporate values were presented to employees by the human resources department staff without being discussed or debated. Some interviewees even claimed to have been asked to "sign for acknowledgment".99

Under those circumstances, although the management defined the vision and identified the system of values, there were faint prospects that company employees actually took direct share in them.

Regarding Romtelecom’s evolution toward sustainability, the existing information [R21, p. 145], [R22, p. 147], [R23 p. 147] indicates the type of social and environmental initiatives of Romtelecom, especially toward the end of the analyzed period. CSR activities were focused mainly on improving the public image by sponsoring projects, events or NGOs. Such an approach is typical of companies in stage 2 of the evolutionary learning process for sustainability presented in figure 1.4.2.1.

The Customer First period: 2006-2011 (covered in section 4.2.3)

Romtelecom’s development after 2006 could not have occurred without the financial stability achieved in early 2006. At the same time the strengths that proved essential for Romtelecom’s competitive thrust during this last period of analysis were developed through the services launched in 2005 – broadband Internet access – and in 2006 – TV services.

Such a development is normal: if in 2003 the changes in market conditions were somewhat abrupt because of the radical legislative changes and the

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99 Group interview notes of February 23, 2010 and March 27, 2012
liberalization of the market, the competitive conditions of the following years became more and more the result of continuous developments in the market. Also, Romtelecom’s strategic behavior grew increasingly consistent. Romtelecom resembles a huge ship whose shifts of direction need to be prepared well in advance, and yet, over time, the company appears to have become increasingly agile and its management, unlike the management of the previous time periods, seems to no longer suffer from the "Titanic syndrome" (Smith and Saint-Onge, 1996): at the sight of the iceberg it tries to change course and speed rather than limit itself to "re-arranging the deckchairs".

We believe the management was trying to shake up the organization by formulating a new vision and mission and by developing a new paradigm – the "Customer First" paradigm. It is the first time period of analysis when the CEO did not only come up with a new mission [R10, p.157] for Romtelecom, but also strived, through meetings held in the territory, to share it directly with the employees.

Through the measures it took after having announced the new strategy and the new business plan, the new management team appeared to have been trying to unfreeze the tacit-explicit conversion processes in the company and, thereby, trigger a challenge to existing mental models. A variety of actions were undertaken to this end:

- organizing regional meetings with the employees in which the company’s critical position in the market was explained;
- redesigning the organizational structure, the processes and the support systems so that they serve the new paradigm;
- involving employees in less conventional projects and activities: “door to door” sales, contests to reward ideas on the implementation of the new strategic directions, launching pilot projects to solve various problems;
- improving organizational communication [R17, p.161] since communication is a key process both in creating a learning organization and in building a sustainable business (Cândea and Cândea, 2008).

All these were meant to create opportunities for learning and inquiry, and even for changing the existing mental models.

All these efforts were needed because of the undesirable organizational situation of Romtelecom, which was confirmed by studies carried out (in 2007 and 2009) by external consultants hired by the company. Their findings [R11, p.159]
revealed that Romtelecom overlapped almost to the coincidence with an O-I model of organization (Argyris and Schöhn, 1974) characterized by: “win-lose group dynamics, conformity, polarization between groups, and organizational games of deception” (Argyris, Putnam and McLain Smith, 1985, p.93), lack of transparency and concealing or disguising relevant information on account of group interests (as presented in section 2.1.1.5).

As discussed in section 2.1.1, the members of such an organization would not create a shared vision and would not challenge existing mental models because of the defensive routines that dominate organizational life.

At the same time, the double-loop learning required by the transformative change that senior management desired to initiate was very unlikely to occur as long as the above-mentioned organizational features indicate the existence of a system with limited learning driven by prevailing single-loop learning processes. In addition, the development of systems thinking in such an organization is unlikely (Senge, 2006) since it is perceived as a threat to the status quo. This is in tune with the findings of one of the above-mentioned studies that confirmed the lack of an all-encompassing perspective of cross-departmental processes.[R13, p. 160]

The tendency of managers and employees in such an organization is to display defensive behaviors (Senge, 1998). Also, they would tend to serve not the corporate mission or customers, but rather one’s superior.

Another change program was the “Organizational culture ambassadors” of 2009-2011 [R14, p.160], which adopted a systems approach to change. The “ambassadors” are employees who are called upon to help “push” the organization to the “tipping point” (Gladwel, 2000)100 by promoting the new values in the organization; they are selected based on their desire to develop (by acquiring personal mastery) and on their demonstrated alignment with the organizational values.

The meetings between the ambassadors and the other employees were meant to promote the creation of a shared vision and to challenge the existing mental models [R15, p.161]. The meetings were also environments for learning and for practicing dialogue and constructive discussion.

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100 The “tipping point” is a point in time when an organization or a group changes its behavior in a sudden and dramatic manner by adopting a completely new practice.
A program carried out at about the same time was the intensive management "soft skills" development program [R16, p.161] targeting a change in mental models and, desirably, in behaviors as well.

Turning now to Romtelecom’s CSR activities [R27, p.154], [R30, p.156] we note that company management perceived CSR not as an investment in the business (except, maybe, in image and brand), but rather as an expense to the business, for which resources had to be found. We drew this conclusion from the statement Yorgos Ioannidis, CEO of Romtelecom between 2007-2011, made in the opening of a 2008 report101: "... and this responsible approach does not stop at our business activity. On our ship we have found the resources needed to support numerous projects, initiatives and ideas for various areas of the Romanian society. We have thus turned into reality words like commitment and involvement, and have become reliable partners for social causes, arts, sports, health and education".

We conclude, then, that during 2006-2011 Romtelecom’s actions were still characteristic of companies in stage 2, Compliance, of the organizational learning for sustainability model (synthesized in figure 1.4.2.1). The company strictly abided by the law regarding labor, health and environmental safety. It acted reactively but efficiently in its response to what was legally required, according to published company reports. Any philanthropic (social) or environmental initiatives were perceived as expenses to the business. Whenever undertaken, environmental projects were usually of the "end-of-pipe" type and social actions were geared to improving public image.

Unlike in the previous periods of analysis, Romtelecom tried to improve its CSR reporting to stakeholders [R24, p.154]. This indicates, possibly, an attempt to move on to stage 3, Beyond Compliance, of the model in figure 1.4.2.1. However, the drive appeared to have been short lived because the opening in CSR communication lasted just for a couple of years [R25, p. 154], [R26, p.154].

And yet, we believe that the company strived to progress toward Beyond Compliance as seen from its efforts to involve employees in the selection of future company CSR projects [R28, p. 155] and from the opportunities it created for employees to carry out such projects on a voluntary basis [R29, p.155].

101 CSR Romtelecom (2008)
4.2.5. Romtelecom case study conclusions

Romtelecom is a company that has progressed little toward sustainability during 1997-2011. In fact, as explained earlier, Romtelecom was purposely selected as a case study because it could help us put our research hypotheses to the test by theoretical replication.

During the first two periods of analysis, 1997-2003 and 2003-2006, the company was at best at stage 2, Compliance. The analysis in section 4.2.4 above, performed by pattern matching against our theoretical model presented in section 3.6 (figures 3.6.1 and 3.6.2), revealed that Romtelecom was at that time far from a learning organization. Thus, the very limited performance in terms of business sustainability is consistent with not having developed as a learning organization.

But the last period, 2006-2011, brings, to some extent, transparency to CSR activity and also a few actions congruent with the Beyond Compliance stage. Thus, involving employees, both in making decisions on what CSR initiatives to adopt and in effecting such activities by volunteering, was a good step forward.

During this last period we have also witnessed attempts to develop traits of a learning organization simultaneously with efforts to advance toward business sustainability. Nonetheless, we could not demonstrate a relationship of causality or interdependence between them.

Our study confirms the theoretical considerations of such authors as Crossan, Lane and White (1999), Örtenblad (2001), Garvin, Edmondson and Gino (2008) and Senge (2006), who state that, even if all learning conditions are created in a group or organization, learning processes will not occur (or will occur to a lesser extent) unless leaders generate them consciously. Moreover, leaders need to create learning opportunities and guide learning if the company is to benefit from that learning.
4.3. Nike, Inc. case study

Like in the previous case study, we will follow the evolution of the company with a focus on internal events without disregard for the external context. Our study will cover the period from 1992 to 2012.

For this time interval we proceeded to analyze the development of the company and the strategic decisions made by company management. We made use of information from a variety of sources: company annual reports, financial reports and public information posted on company websites, reports and articles of monitoring agencies and of NGOs, articles in the economic and sustainability-related press. For the purpose of this analysis, we delineated three time periods: 1992-1998 (that we named the "Social Challenges" period), 1998-2005 ("Business Integration Phase") and 2005-2012 ("Positive Vision"). The boundaries of the three periods are somewhat arbitrary as there is a continuum in the evolution of the factors and events between 1992 and 2012.

Nike, Inc. will be referred to as Nike.


According to documents originating from company sources\(^\text{102}\), the idea of business sustainability emerges at Nike starting in the early 1990s particularly in relation to the environmental aspect. Following a session of scenario planning \([N41]\) organized by Phil Knight, cofounder of the company and, at that time, chairman and CEO, the environmental issues are brought to the attention of the management. In 1993, a department called "The Nike Environmental Action Team" (NEAT) is created, with a monitoring and compliance role. The same year also sees the formation of a three-person team, which will manage a program to collect worn-out shoes, called "Reuse-a-Shoe" \([N39]\). The program started in the early 1990s and is still in progress today.\(^\text{103}\)

The NEAT team comes in contact with Paul Hawken's ideas about the role of organizations in environmental sustainability\(^\text{104}\), which make a strong impact on the

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\(^{102}\) Evolution within Nike (2001)

\(^{103}\) Reuse-a-Shoe (2012)

\(^{104}\) Paul Hawken's view on the role of organizations in the sustainability of the natural environment can be found in Hawken (1993).
team members. “The message seemed simple”, recalls the former director of NEAT, Sarah Seven. “The planet’s living systems are in decline and without them there is no such thing as society, let alone business. Our choice as a business seemed clear — continue to contribute to the decline, or enter a new era of commerce where human and business needs don’t deplete living systems”\textsuperscript{105}.

As a result, in 1998 the company adopts The Natural Step\textsuperscript{106} (TNS) principles and Phil Knight issues a statement on the company sustainability-related policy\textsuperscript{107}. [N1]. His views “fit in with his desire to make sure Nike is a company built to last long into the future.” [N40]. Therefore, although “sustainability is a prime example of a grassroots movement within Nike” [N2]\textsuperscript{108}, it enjoys the full support of top leadership since its beginnings. [N3].

However, the company does not exercise the same proactivity in the social area. Apparently, social issues come to the attention of company management only in the wake of increasing pressures coming from mass media, NGOs and public opinion.

As we have mentioned previously, Nike's business model, common to many other corporations in the footwear and apparel industry, relies on outsourcing manufacturing. The problems existing in Nike’s partner factories are far from singular, as similar conditions affect the contractors of its competitors\textsuperscript{109}. A series of press releases about the work and safety conditions in Nike’s suppliers’ factories turn Nike, in 1990-1997, into a favorite target of social and anti-globalization activism. The reason behind this is that Nike was the global leader in its industry, the Nike brand being one of the most popular and most visible worldwide\textsuperscript{110}.

A number of NGOs decide to focus on Nike and on the problems in its suppliers’ factories, while a series of websites and newsletters appear, devoted exclusively to watching Nike\textsuperscript{111}. The company becomes the target of many strikes, street protests and picketing of its offices and shops, both in the United States and in

\textsuperscript{105} Evolution within Nike (2001)
\textsuperscript{106} The Natural Step is a Swedish NGO founded in 1989. It promotes a framework of system conditions for the sustainability of human activity on Earth.
\textsuperscript{107} The principles of the sustainability policy are listed in Nike (1998).
\textsuperscript{108} ibid
\textsuperscript{109} Zadek (2004)
\textsuperscript{110} Ritson (2008)
\textsuperscript{111} See, for example, the NikeWatch campaign of Oxfam at https://www.oxfam.org.au/explore/workers-rights/nike/. Oxfam is an international confederation of organizations whose mission is to fight poverty and injustice around the world. Its web page on Nike is active to date.
the countries of its partners\textsuperscript{112}. Appendix N.1 reproduces a 1999 post on a blog dedicated to Nike by one of the many NGOs involved in the campaign to expose the company; the atmosphere created around Nike at that time is readily seen. Appendix N.2 lists the results of a study concerning the number of negative articles about Nike that appeared in the press during 1992-2002. [N4].

These ample movements put an enormous pressure on Nike: its brand and image, the key elements of its differentiation strategy, carefully built over 30 years, are being threatened. [N5].

The initial response of Nike is a very good textbook example of how CSR problems should not be treated. Later, even Nike top managers acknowledged the mistake.

To illustrate we quote a few reactions of Nike officials from that period. [N33]. In the early '90s, Nike's Vice President for Asia said: “we did not know the first thing about manufacturing. We are marketers and designers”. Nike’s general manager in Indonesia argued as well: “They are our contractors. It’s not within our scope to investigate [allegations of labor violations]”\textsuperscript{113}.

In the documentary "The Big One", directed by Michael Moore in 1997, Phil Knight, cofounder of Nike, visibly annoyed by Moore’s questions about the exploitation of child labor in Nike’s partner factories, bursts out: “Tell it to the United Nations”, and one of the senior managers says, recalling those moments: “We said, ‘Wait a minute; we’ve got the best corporate values in the world, so why aren’t you yelling at the other folks?’ That was a stupid thing to do. It didn’t get us anywhere. If anything, it raised the volume higher.”\textsuperscript{114}

Speaking about this stage of company development Hannah Jones, Vice President of Sustainable Business and Innovation at Nike, declares in 2011: “Being attacked in the early ’90 around issues of anti-globalization and issues of poor working conditions was one of the single best things to have ever happened to this company, because, frankly, it gave us a very early wake-up call to what was going to become a greater wave of change, … a massive revolution in the business community.” With respect to the attitude at that time: “ ... it’s really very much about a

\textsuperscript{112} Two chronologies of actions to expose Nike, one regarding Indonesia in particular, the other regarding the entire world are found at http://depts.washington.edu/ccce/polcommcampaigns/NikeChronology.htm, respectively http://www.citinv.it/associazioni/CNMS/archivio/multinazionali/Nike_Camp_Chronology.html.

\textsuperscript{113} Locke (2002)

\textsuperscript{114} Zadek (2004)
reactive, fire fighting mode. … it took us a while to get through that because we were extremely defensive and extremely aggressive. [N6]. … we really … those first early years we did everything wrong. We didn’t understand what we were accused of, we didn’t accept it – and we simply added fuel to the fire”115.

4.3.2. The Business Integration Phase116: 1998-2005

The year 1998 marks a turning point in the attitude of Nike management about corporate sustainability. As previously mentioned, it is the year when, upon adopting The Natural Step principles, Nike announces its sustainability policy, which was expressing Nike’s perspective on environmental issues more than anything else. But, in the same year Phil Knight announces, in a speech delivered at the National Press Club117, a radical change of attitude about the social problems in its suppliers’ factories and announces a series of reforms of the minimum mandatory requirements that Nike will impose on its contractors by introducing a Code of conduct.

Also an internal reorganization occurs during this same time period, by which a position of vice president of corporate responsibility is created, reporting directly to the brand president and responsible for all matters regarding global corporate sustainability.

A significant step is made in 2001 when the Corporate Responsibility Committee of the Board of Directors is established, led by one of the board members, Jill Ker Conway118. This committee’s role is to oversee the company’s reaction to events and incidents related to social responsibility. [N44]. It also has to involve the Board of Directors directly not only in working with contractors to identify and resolve social problems of the workforce (which posed a threat to NIKE’s reputation and brand at that time) but also in a wide range of sustainability-related matters such as environmental and occupational health issues. Another role of the committee is to oversee the publication of the company’s first stand-alone CSR report. The committee institutionalizes Nike’s commitment to responsible performance.

115 Jones (2011)
116 ibidem
117 Knight (1998)
118 Paine (2014a), Paine (2014b)
We return now to the year 1998 when Nike adopts the Code of conduct. The Code is imposed on contractors to sign for acknowledgment and comply with, and then the company verifies compliance with the help of internal or external auditors. In case of breach of some condition of the Code, contractors risk penalties or even contract termination.

Nonetheless, Nike’s conditions for contractors regarding production costs and delivery time have been conflicting for a long time with the limitations on overtime and wages provisioned in the Code of conduct. Having to choose, many contractors prefer to meet Nike’s cost and delivery criteria to the detriment of complying with the Code of conduct\textsuperscript{119}.

But company management eventually grows aware of the problem and sets up a team headed by the vice president of corporate responsibility, who is given free rein to solve it.

Perceiving that what it has on its hands is a systemic problem, the team no longer focuses on the behavior of contractors alone, realizing that is a mere symptom of a bigger problem. \textsuperscript{[N8]} Research reveals contradictions between, on the one hand, Nike bonuses to the teams dealing with suppliers (based on industry wide accepted incentive schemes rewarding advantageous terms for delivery time, quality and price negotiated with contractors) and, on the other hand, the Code of conduct imposed on suppliers. Starting from those findings Nike takes the necessary steps to change the bonus system and, at the same time, realizes that corporate responsibility has to be treated as an integral part of the company business model in order to prevent similar contradictions and side-effects from occurring.\textsuperscript{120}

This is not an easy thing to do because Nike is aware that the necessary changes involve real business costs and risks to the extent that the other competitors in the industry do not implement similar changes. There is a general risk that Nike is taking in its effort to embrace responsible practices – the risk of being the first (and possibly the only one in the industry) to change its practices\textsuperscript{121}. Hannah Jones, Vice President of Nike, brings out the same point when saying: “there is a cost to early leadership, and it’s the early cost of investing at a prototype level and all the money that goes into that R&D. So the faster we can get this to market and the

\textsuperscript{119} Locke (2002)  
\textsuperscript{120} Zadek (2004)  
\textsuperscript{121} A very good in-depth discussion of the problem can be found in Zadek (2004).
faster we can get sustainable options to be the default, the more viable it becomes. It becomes a kind of self-fulfilling prophecy in a very good way.”

Thus, Nike becomes a founding member of the Fair Labor Association (FLA), a nonprofit group consisting of coalition of human rights activists (companies, trade unions and organizations). FLA’s declared mission is: “to create lasting solutions to abusive labor practices by offering tools and resources to companies, delivering training to factory workers and management, conducting due diligence through independent assessments, and advocating for greater accountability and transparency from companies, manufacturers, factories and others involved in global supply chains”.

At the same time, Nike initiates and contributes to the creation of the Global Alliance for Workers and Communities foundation, in partnership with the International Youth Foundation, the MacArthur Foundation and the World Bank, with the purpose of improving the living conditions of workers in emerging economies. Right after its establishment, the foundation focuses on studying and improving the working and living conditions of young women, as women represent by far the majority of the workforce in Nike’s contractor factories. In order to assess the current situation and identify possible ways to make a change for the better, the Foundation’s employees interviewed over 67,000 women workers, in their mother tongue and in informal locations, so as to encourage them to speak freely and frankly. Nike then makes public the findings and conclusions of the survey, as well as the actions undertaken, with the hope that this will prompt other companies to act and thus spur a joint effort to improve the working conditions in the industry.

Another social initiative is the setting up of the Nike Foundation in 2004, with the purpose of supporting adolescent girls in poor areas of the world. The company hopes that this way it can contribute to effectively addressing women’s poverty and gender-based inequality, two of the United Nations Millennium Development Goals. Philip Knight, Chairman of the Board of Directors considers the Nike Foundation to be a step ahead in Nike’s development as an “engaged global corporate citizen” and that the foundation’s investments “will spark a positive cycle of

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122 Kenedy (2012)
123 FLA was founded in 1999; http://www.fairlabor.org/
124 Paine (2014a)
125 Paine (2014b)
126 Details at: http://about.nike.com/pages/community-impact
development, complementing the company's efforts to improve its fundamental business practices. The initiative is of strategic importance because of the workforce structure in contractors' factories; for example, at that time in Vietnam 90% of Nike workers were girls and women between 15 and 28 years of age.

Turning now to the environmental side of sustainability, the management of the company pays attention, besides announcing sustainability-related policies, to integrating sustainability values in the organizational culture and generating a shared perspective of sustainability across the organization. [N7].

Management's preoccupation with bringing people together and building a strong organizational culture is not new, as the company has made continuous efforts to build a culture around the Nike brand and what it represents, a culture based on the ethical principles of sports: loyalty and team spirit. Nike employees boast a "Nike way of life", which has as a central value the preoccupation about sports and with practicing sports. Cultural artifacts back that culture. For example, employees are called "players", managers "coaches" and meetings "huddles", while the Nike logo (known as the “Swoosh”) appears everywhere: on mugs, screens and even tattooed on the skin of older employees.

Although the company has a culture and tradition of innovation, of competitiveness and entrepreneurship, honesty and team spirit are considered equally important. In line with its philosophy derived from the ethical principles of sports, Nike expects its employees to follow two basic precepts: “Honesty first, and competition second. Compete with yourself not your colleagues.”

As seen from the perspective of the organizational culture, in our opinion sustainability values were likely to be readily adopted by Nike, as associating sports and a healthy way of life with environmental protection is almost natural.

We also note that integrating the environmental side of sustainability into the organization's actions, culture, policies and strategy seems to have continued to follow a pattern already established: an initiative that emerges from the ranks of the organization benefits from the top management strategic support.

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127 Roner (2005a)
128 As defined by E. Schein, cultural artifacts, as the first level of organizational culture, “include the visible products of the group, such as the architecture of its physical environment; its language; its technology and products; its artistic creations; its style, as embodied in clothing, manners of address, emotional displays, and myths and stories told about the organization; its published list of values; its observable rituals and ceremonies; and so on” (Schein, 2004, p. 26).
129 Enderle et al. (2000)
Without claiming an accurate chronology, we signal several events related to this matter during 1998-2005.

During the aforementioned period, the main environmental concern at the corporate level is still about compliance and risk prevention. However, Nike adopted a long-term perspective of environmental sustainability as early as 1995, driven by the Advanced Research and Development Division for Footwear department headed by Darcy Winslow. The department was responsible for exploring new ideas, technologies and materials with a possible disruptive, innovative impact on Nike in the following 15-20 years, and for identifying the ones that could create new growth opportunities for Nike.

In 1998, Winslow contacts the McDonough Braungart Design Chemistry (MBDC) Company, which performs a study on the toxicity of the materials making up a Nike shoe. The results are revealing for her, who recalls: “The results really opened up my eyes. I thought: ‘Do we really understand the products we – and our whole industry – are creating?’”

She talks to the top corporate management to share her belief that, if Nike wants to genuinely support sustainability, the thrust should be in finding solutions to eliminate waste and toxics from company products right from product conception. The management supports her initiative and appoints her, in 1999, to head the new global division of Sustainable Business Strategies. The division will define, in line with The Natural Step principles, three major environmental goals for 2020: Zero Waste, Zero Toxics and Closed Loop, which the corporation assumes.

These goals are going to provide the vision for the development of the organization in the next 20 years and are published in Nike first report on CSR in 2001 (CRR Nike, 2001, p.17).

Company leadership considers it necessary to integrate this vision into the organizational activities and culture and focuses, until 2004-2005, on this objective. In this regard, Darcy Winslow declares in an interview given at the “First Summit on

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130 Senge (2006), p. 304
132 “Eliminating the concept of waste in our product design, use of materials, energy, and any resource that cannot be readily recycled, renewed or reabsorbed back into nature.” (CRR Nike, 2001, p. 17).
133 “Eliminating all substances that are known or suspected to be harmful to human health or the health of biological or ecological systems.” (CRR Nike, 2001, p. 17).
134 “Closing the loop and taking full responsibility for our products at all stages of our product and process life cycle, including the end of a product’s useful life when consumers are likely to dispose of it.” (CRR Nike, 2001, p. 17).
the Future of the Corporation” in 2007 that, during the 1995-2005 period, Nike laid the foundations for its corporate responsibility orientation, thus generating education, awareness and action all through the organization\textsuperscript{135}. [N18].

The way Nike dealt with this is of particular interest for our study. Unlike the procedures used to implement other environmental initiatives, Winslow was unwilling to generate change through management directives but rather through people’s voluntary involvement in the project. [N10]. This results in one-on-one meetings between her and many of the company’s managers and designers, and also in a two-day meeting between 200 of the company’s key managers and designers and thought leaders in sustainability. According to Winslow, the key to success is to relate the vision for Nike development over the next 20 years to what people really feel and think: "after discussions ... I watched people’s reactions to our initial efforts and was so encouraged; ... I rediscovered ‘who’ Nike is, I realized that we are people who innovate. This company is all about innovation. That is what really turns people on"\textsuperscript{136}. [N11]. So, Winslow adopts a different managerial approach that she described as follows\textsuperscript{137}: “We had a mandate from the Corporate Responsibility team to be ‘PVC-free’, to get PVCs out of our shoes. But that came across as ‘Stop, you can’t do that’. To designers, this basically closes a door. We wanted to open doors by saying ‘Think about it this way: There are basically untold opportunities for creating completely new products without compromising performance or aesthetics’ ... it took time and I didn’t speak to people just once ... I had to go back and pursue it again. But it was like finding diamonds in the rough – people who were just waiting to have this conversation. Together ... we were all seeing that the whole sustainability arena offers untold opportunities for innovation.” [N12].

A significant initiative linked to the events described above and aimed at easing the absorption of the sustainability vision into the organization was the "Team Shambhala" internal program\textsuperscript{138}. [N13]. The program is launched in 1999 out of Nike’s desire to change the way the company addresses sustainability problems. The purpose is “to get their entire company – 20,000 people worldwide – grounded in a way of thinking that naturally took environmental and social issues into account

\begin{flushleft}
\textsuperscript{135} Winslow (2007) \\
\textsuperscript{136} Senge (2006, p. 304) \\
\textsuperscript{137} Senge et. al. (2009, pp. 240-241) \\
\textsuperscript{138} Named after the Tibetan warriors who fight, unbeknown to anyone, for the common good.
\end{flushleft}

183
in every decision the company made and every action they took”\(^\text{139}\), declared one of the external consultants involved in the program, Joe Laur.

The activities of the program, which lasted nearly one year, were attended by around 100 persons: 65 "captains" – leaders from all over the world and from various areas of the organization, supported by 35 "champions" – directors, general managers and vice presidents. The basic idea of the program was to select a group of key leaders and influential informal leaders in order to develop their abilities to think systemically about environmental issues, accelerate their self-learning and empower them to make real-time decisions in pursuit of business goals. [\textit{N14}].

The program was focused on change management, leadership skills and sustainability knowledge, and was founded on the principles of systems thinking and organizational learning. The consultant was SoL-Sustainability Consortium page\(^\text{140}\).

Before we comment more about the Team Shambhala program, we will add some information on the SoL-Sustainability Consortium. It is an association of industry leaders that share ideas and tackle common issues in commitment to more sustainable business practices. Nike collaborates in the consortium [\textit{N15}] with other leading companies such as Shell, BP, Ford and Unilever. The association declares on its web site that it is “a ‘learning community’ of companies committed to accelerating the creation of knowledge needed to achieve a truly sustainable economy. The Consortium utilizes the disciplines of Systems Thinking and Organizational Learning to explore and address the knotty issues surrounding the imperative to remain profitable while nurturing the natural systems and the communities within which we do business. This ‘triple bottom line’ approach provides an overarching framework for all we do”.

The Sol-Sustainability Consortium projects in which Nike is involved are telling of the future interests of the corporation (following are brief project delineations excerpted from the consortium’s site):

– “Changing Rules of Game – How can we engage with the Political, Legal and Financial sectors to overcome systemic barriers to achieving sustainability?”

\(^{139}\) Laur (2010)

\(^{140}\) The Society for Organizational Learning (SoL) was founded by Peter Senge in 1997 in replacement of the Center for Organizational Learning at MIT https://www.solonline.org/. SoL has a Sustainability Consortium; details at: http://www.environmental-expert.com/companies/society-for-organizational-learning-sol-sustainability-consortium-23851.


– “Materials Pooling” – How to pool knowledge, resources and buying power to reduce costs, waste and ecological impact on material platforms as diverse as corrugated board, packaging materials, chromium and polypropylene.

– “Women Leading Sustainability” – If women can lead sustainability from the inside out, how can we apply their innate systems and relationship abilities to restore balance to the world, build multi-sector partnerships and exceed the triple bottom line?”

The “Shambhala” project appears to be a big success. This is what Darcy Winslow had to say in 2010, at a reunion of a number of Shambhala “graduates” hosted by Nike in order to try to capture the “magic” of Shambhala for a new generation and a new era: “The result of this one year intensive helped transform Nike’s approach to sustainability, created 100 internal champions who launched dozens of landmark projects that continue to deliver against our 2020 goals.”

An important outcome of the program is a set of 11 Maxims [N16] – principles that guide the activity of Nike workers ever since and embody the Nike spirit. These Maxims, reproduced in Appendix N.3, include one maxim for guidance in sustainability (“Do the right thing”); they are included in the Nike CSR Report for 2011.

Nike management has been learning a lot from the experience of these years and from other subsequent initiatives.

Indeed, Darcy Winslow declares in 2007 retrospectively: "It took us a long time to understand what this word, sustainability, means and, at SoL-Sustainability Consortium, Senge and Elkington helped us think about it. At that time we were acting, but we were also trying to figure out what that means from a strategic perspective.”

It is significant that, starting from this moment, sustainability and innovation become inextricably intertwined at Nike. In the CSR report for 2004 the vision for the environmental side of sustainability absorbs the objectives established in 2001 for innovation and products. The report states: “Our single unifying goal in FY04 and beyond is to create innovative and sustainable products. With this integrated,
business-relevant approach, we ultimately will be able to focus our efforts against the two long-term goals of waste and toxics elimination."

We close the analysis of this time period by underlining that the CSR report for 2004 (published in May 2005 after three years of silence following some legal problems related to the CSR report for 2001\(^{146}\) constitutes a landmark because Nike is the first company in the industry to publish the complete list of its suppliers and data on their locations. Behind this transparency lies the hope that other companies will join over time the collaborative effort to improve the system \([N47]\): “Our belief is that in disclosing, the industry will find ways to better share knowledge and learning. This, in turn, will facilitate the building of further partnership approaches that are built on best practice and gradually lead us to standard codes, standard approaches to monitoring, standard reporting, standard parameters for transparency … All of this should support efforts to move to common standards, greater collaboration and greater transparency, which in turn supports the development of a marketplace where responsibility and competitiveness go hand-in-hand\(^{147}\).

The press and the civil society receive the initiative very well, as it creates hope for greater transparency in the industry, where the rule at that time was to keep silent and conceal any possible problems.

However, the initiative is considered only one step, though important, that should be followed by other effective improvements in the way Nike treats the social problems in its factories\(^{148}\).

Hannah Jones, Vice President of Sustainable Business and Innovation, outlines the significance of this period of analysis and the way Nike senior management perceives it later on. At the Conference on Sustainable Business & Social Impact at Duke University's Fuqua School of Business in 2011 she declares: “Once you understand a little bit better, then it comes a period of time in which the company has to delve back into themselves engaging with stakeholders, and start to learn the odd of conflict resolution, of listening, and looking back into oneself … and taking responsibility. That in itself is a massive transformation culturally for a company to go through. Once you do that and start to articulate and understand your full footprint, whatever it be environmental or social it becomes pretty much clear that

\(^{146}\) It is about the Nike vs. Kasky case, well documented, for example, in Werther and Chandler (2012).

\(^{147}\) CRR Nike (2004)

\(^{148}\) Roner, 2005b
one is going to have to really consider how to work in partnership with civil society and others, and also how you to start looking internally, changing the business processes and business systems. And I call that the Business integration phase.\textsuperscript{149} [N17]

4.3.3. The Positive Vision period: 2005-2012

In the summer of 2006 Nike announces a major corporate reorganization.\textsuperscript{[N19]} The purpose of this reorganization is to accomplish better customer service and build an organizational structure that would enable better inner workings.

Up to that moment the corporate organization was aligned with three product categories: shoes, clothing and sports equipment, the corresponding business units being poorly interconnected. The new structure is organized around six categories of activities: running, men’s training, basketball, soccer, women’s fitness and sports. Nike is hoping thereby to achieve better customer orientation by offering complete collections of what customers need when practicing a certain sport category.

The company CSR report for 2007-2009 announces completion of the reorganization. The goal of the new structure is to prepare Nike for the future by aligning its core competencies with forthcoming opportunities.\textsuperscript{150}

The transformation brings about a fundamental change in the role of the CSR function, which, from now on, has the role to support Nike’s growth strategy and facilitate the transition toward a sustainable business model.\textsuperscript{151}

As a result, the CSR function becomes “something entirely different”\textsuperscript{152} and receives a new name consistent with its redefined role in the corporation: Sustainable Business&Innovation (SB&I). [N20]. The new function is staffed with 130 people, who work closely with sustainability experts integrated directly in other divisions of the organization such as retail, logistics or information technology.

“It’s one thing to try to retrofit the past, but actually it’s way more effective to try to design the future,” states Hannah Jones, Nike’s vice president and leader of the new SB&I division. “We collectively are running business models that had externalized the true cost of doing business. We socialized the risks; we socialized the impact on the environment, on communities … Once you start to realize that

\begin{flushleft}
\textsuperscript{149} Jones (2011) \\
\textsuperscript{150} CRR NIKE (2010) \\
\textsuperscript{151} ibid. \\
\textsuperscript{152} ibid.
\end{flushleft}
[...you enter...] the space of innovation and completely new business models. And so our journey has been that, that’s why we throw away the word ‘Corporate Responsibility’ and introduced the word ‘Sustainable Business and Innovation’ – because we needed to move out of being police and move into being the architects and designers of the future growth strategy for Nike.”153 [N21].

According to the CSR report for 2007-2009, the new division has the following main responsibilities:

- to help the company blend corporate responsibility concerns with business objectives,
- to develop generalizable solutions, which enable Nike to evolve toward a closed-loop business model that moves closer to achieving zero waste by reusing or recycling materials.

SB&I division’s position in the organizational structure emphasizes its key role (Appendix N.4): the SB&I team is headed by a vice president, who reports directly to Nike’s CEO and to the Corporate Responsibility Committee of the Board of Directors.

Also the responsibilities of the Corporate Responsibility Committee widen. While, as shown in the section regarding 1998-2005, the committee is involved in monitoring, supervising and resolving problems and incidents related to corporate social responsibility, from now on its responsibilities expand into the field of innovation. It assumes a central role in supporting the innovation effort to turn the company’s business model into a more sustainable one. [N45]. For Nike, this means a business model that should continue to deliver growth in spite of the macro environment difficulties such as finite resources, climate change and demographic and social challenges.154 [N22].

The SB&I division is called to play a key role in this process, as its vice president affirms.155 This is phrased in the CSR report for 2010-2011 as follows: “Our vision is to build a sustainable business and create value for Nike and our stakeholders by decoupling profitable growth from constrained resources”; the report goes on by saying: “This is not just key to our sustainability strategy, it’s part of our business strategy – and it guides us as we move forward.”156 [N23].

153 Jones (2011)
154 Paine (2014b)
155 Webb (2011)
156 CRR Nike (2011), p. 11
This new vision is born out of a companywide effort [N24]. In 2005, Nike carried out a comprehensive program that encouraged its employees to envision Nike’s sustainable future and the role they would have in that future. The shape of that future and the way to reach it was defined through specific group exercises [N25] and brainstorming sessions.

At the same time, Nike’s managers participated in scenario planning exercises with the help of The Natural Step. [N26].

A process whose purpose was to develop a set of scenarios that are accepted by all the participants followed the scenario planning sessions. All those scenarios point to one conclusion: Nike’s way of doing business up to that moment would not do in the future¹⁵⁷. In 2011, a manager recalls that, after the scenario planning sessions with The Natural Step, and after using a specific instrument, “the funnel”, [N27] “we identified a number of growing constraints on business and economic growth: namely water scarcity, shortage of natural resources, climate disruption, social inequity, all the things that we collectively thought to. At that moment in time, what was very clear [...] we need to get to a place where growth is decoupled from the scarce natural resources and has far more equity built into the fabric of how wealth is disposed¹⁵⁸. [N28].

The transformation this vision calls for is radical: “... we’ve undergone a fundamental shift in how we operate and organize at Nike and along with that come how we organize and reallocate resources and work associated with corporate responsibility”¹⁵⁹, [N29] states Darcy Winslow in 2007 in a plenary speech delivered at the First Summit on the Future of the Corporation conference.

The radical change in the way Nike perceives business is felt a bit later (starting with 2012)¹⁶⁰, but it is rooted in the transformation discussed above and in an area very important for Nike: the relationship with the materials suppliers and equipment manufacturers. If until now the policy was to merely penalize and even terminate the contract with the suppliers and manufacturers who failed to comply with Nike’s Code of conduct and internal standards, the new approach blends in communicating the “vision of a greater good”¹⁶¹ [N42].

¹⁵⁷ CRR Nike (2013)
¹⁵⁸ Jones (2011)
¹⁵⁹ Winslow (2007)
¹⁶⁰ Kenedy (2012a)
¹⁶¹ Kenedy (2012a)
In this regard, Vice President Hannah Jones states as early as 2011: “What we do well is we design and market; and everything else is pretty much outsourced to partners around the world… and so your relationships with those partners and how you put the right carrots and sticks in place it’s key […] So both in terms of how we talk to our factories about labor conditions, how we talk to our suppliers about materials we are actually trying to build a whole system of incentivizing the behavior we want to see and sanctioning the behavior we don’t want to see … and it’s all linked in into the indexes, both in Considered Index and we build now (2011 – note ours) a Manufacturing Index that will basically push our supply manufacturers to move to be lean, green, empowered and equitable.”

Indeed, in 2012 Nike announces the release of an index, called Sourcing and Manufacturing Sustainability Index (SMSI), which ranks Nike’s manufacturers on a scale with five levels: red, yellow, bronze, silver and gold. According to statements by company representatives, this system places the performance indicators of sustainable production at the same level of importance as the classic indicators of factory activity (costs, quality, delivery time, etc.).

Talking about the new system Vice President Hannah Jones declared that Nike has built a strategy that consists in working with fewer business partners (the number of partners exceeded 1,000 in 2011 – note ours), but under longer-term agreements. Working with a big supplier increases the chance that it will understand Nike vision better and that it needs to integrate that vision in its business model. Then, this can cascade throughout its group. It was hoped that suppliers realize two things: first, that doing business with Nike will depend on their commitment to sustainability, and second, that the new relationship between Nike and its contractors has to turn away from trying to just make things less harmful and, instead, discover ways to do good, to envision a better world. The message sent to suppliers through the new index is that, if they want to embark on this journey with Nike, they will have to invest in their workers, in lean systems, in efficiency and in ecomanagement.

\[N43\]

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162 “Considered Index - measures the effective use and management of resources. From the first glimmer of a product concept, we would consider everything involved in bringing a shoe to market – from raw materials sourcing to transportation – all aimed at minimizing our environmental impact.” (CRR Nike, 2010).

163 Jones (2012)

164 Kennedy (2012a)
**The Nike Considered Design project [N34]**

As already mentioned, Nike sees its evolution toward sustainability inextricably tied to protecting the resources it consumes, which can be done by moving in the direction of a closed-loop business model. The Considered program, launched in 2005, is symbolic of this drive.

The declared purpose of the Nike Considered Design project “is to design products that are fully closed-loop: products produced using the fewest possible materials, designed for easy disassembly and capable of being recycled into new products or safely returned to nature at the end of their life.”\(^{165}\) By following Nike general vision and strategy, the products resulting from this program will abide by the standards developed according to the The Natural Step principles.

The goal of this program is not only to create a product line. It is mostly meant to embody Nike sustainability vision as a driver of growth. In this regard, Lorrie Vogel, general manager of the program, states that, according to company management, if Considered results in a mere product line, then it will be a failure. Instead, the program is meant to become an Ethos, capable of changing everything Nike creates. The program’s objectives, which involve the entire company, are to have 100% of the footwear become Considered by 2011, and 100% of the apparel by 2015.\(^{166}\)

The project managers decide to identify a vision for the project and to share it with all project members and with Nike employees at large: “We don’t want to create products that are less bad, what we want to do is create a vision of what good looks like for Nike [N30]. It took us a long time to figure it out … for us is a closed-loop product … Once we figured out what our vision was, we wanted to make sure that everybody in the company share that vision. We created a little video and it was really because we wanted to make sure that everyone at Nike was focusing in the same direction.”\(^{167}\)

The video was first presented to the design teams since they are the ones with the greatest impact on the product. Project managers tried to make sure that the designers understood what is expected and asked them to create sustainable products. But the results remain to be seen because designers do not know where to

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165 CRR Nike (2010)
166 Vogel (2011)
167 ibidem; the Youtube presentation includes the mentioned video.
Sustainability is quite disconcerting; focus on what: water, waste, energy, toxicity? What should we focus on? wonders one of the project participants. [N31].

In response, the project team focuses on creating tools and systems [N32] that provide Nike designers with instant feedback on the quality of a planned product in terms of environmental impact and performance. The performance of the resulting product is important because “Nike would never sacrifice performance for a more sustainable product”\textsuperscript{168}. In other words, the designers have to create sustainable products that should deliver at least the same performance as the other Nike products. To this end, the newly created system offers designers, real time alternatives to various materials or technologies. The system, which underlies the Considered Index, is a "living" system that ensures the continuous advancement of the quality of the Considered products. The new creations receive points, are ranked according to a scoring system whereby a product obtains a bronze, silver or gold rating. A product’s rating should be at least bronze in order for the product to be even considered for production. The system updates continuously: what was silver not long ago becomes bronze, thus ensuring the continued progress\textsuperscript{169}, as Hannah Jones declared.

The results appear to be impressive. By 2011 all newly designed Nike shoes are "Considered". Moreover, the project results were transferred to other products as well, so 98% of all newly launched products in early 2011 are "Considered". All these led to a 19% reduction in waste from finished goods manufacturing and a 20% increase in the use of environmentally friendly materials. At Nike’s scale, this waste reduction is equivalent to not having produced 15 million shoes\textsuperscript{170}.

While working on developing the Considered Index, a tool that cost Nike 6 million dollars, managers realized that many other companies worldwide are probably conducting similar research projects, which entail equally large costs. If all these companies were to join forces the process would be more effective and efficient.

Consequently, in 2010 Nike launches the GreenXchange platform [N35] set up to allow organizations to collaborate in the creation of intellectual property,

\textsuperscript{168} Vogel in MacArthur (2010)
\textsuperscript{169} Jones (2011)
\textsuperscript{170} Weeland (2011)
processes, and ideas or in coming up with solutions to common sustainability-related challenges.

*Developments at Nike, Inc. after 2012*

We explained in the preface to this book why we chose to conduct a case study on Nike that ends in 2012. We will now briefly review subsequent events on the basis of public reports issued by the company and newspaper articles.

After 2012, Nike’s effort to integrate sustainability into its strategy continues along the same lines as presented in the case study.

In this regard, the Nike corporate responsibility report for 2012-2013\(^\text{171}\) states: “For more than 15 years, we have been on a journey of sustainability integration. This task is essential. To achieve ongoing, profitable growth, sustainability considerations must be deeply embedded throughout the company. At NIKE, sustainability is not just about vision and values. It depends equally on having the systems, structures, people, responsibilities and accountabilities in place to ensure our commitments are reflected in our day-to-day business activities. We are working to integrate sustainability into every aspect of our business. Our aim is to challenge, push and explore ways that change the game entirely for materials, design and manufacturing. We don’t grow just to get bigger. We grow to be better and do better.”

Blending innovation and sustainability remains core. Therefore, the role of the SB&I division is further expanded, the team focusing on enabling the company to thrive in a sustainable future, and providing the insights, tools and expertise to hardwire sustainable decision making into global business operations.

Moreover, in early 2013, SB&I becomes part of Nike’s core Innovation function, streamlining the process of scaling sustainability innovation throughout the company.

The relationship with the suppliers of materials and equipment manufacturers continues in 2013-2014 on the basis of the principles established in 2012. Thus, on the one hand, Nike requires a commitment to lean as part of being accepted into the company’s source base and a minimum commitment and progression for positive ratings in the Sourcing and Manufacturing Sustainability Index, a component of

\(^{171}\text{CRR Nike (2013)}\)
Nike’s Manufacturing Index developed in 2011 and which assesses factories based on sustainability, cost, quality and on-time delivery. Also, some of the standard metrics Nike uses to assess factory adoption include productivity, human resources management assessments, turnover, absenteeism, and factory implementation of and results from worker engagement and well-being surveys.\(^{172}\)

In parallel, the effort of sharing a “vision of good”\(^{173}\) is kept going by working with the supply chain in order to demonstrate the value of lean processes and of good human resources management as drivers of sustained, improved business performance.

Nike continues its proactive effort to positively change systems in the industry in terms of sustainability. In this respect, the same report\(^{174}\) states: “At Nike, we increasingly see sustainability as a source of competitive advantage and business value. However, we also see a bigger picture. Ultimately, our collective future depends on solving problems that are much larger than any individual company or organization can tackle on its own – issues such as climate change, resource scarcity and substandard working conditions. We are working to apply systems thinking to materials and manufacturing. We have collaborated for many years with other companies in our industry through organizations such as the Sustainable Apparel Coalition, with multistakeholder groups, including the Fair Labor Association, and with organizations such as the International Labor Organization and the International Finance Corporation. Our efforts have been aimed at raising the bar for performance across our industry, which requires actors across the value chain to collaborate, share information and innovate more effective, efficient and equitable ways of doing business”.

An instance of collaboration, such as mentioned above, is the partnership with the Fair Labor Association to develop the Sustainable Compliance Initiative. This initiative, still under development, provides tools to improve the quality, consistency and efficiency of efforts in the industry to comply with country laws/regulations, and company standards.\(^{175}\)

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\(^{172}\) CRR Nike (2013)
\(^{173}\) Kenedy (2012a)
\(^{174}\) CRR Nike (2013)
The three major corporate environmental goals for 2020 established in 1998 (Zero Waste, Zero Toxics and Closed Loop) and the objectives set in 2005 through the Nike Considered Design program are being pursued, although some of the targets prove difficult to meet and measure: “Continuous learning will be essential, as some of our goals will be difficult to meet. For instance, we are still working, along with others in our industry, to identify a consistent, meaningful and reliable way to track progress toward our target of zero discharge of hazardous chemicals by 2020.”176

We conclude this case study with the answer given by Hannah Jones to the students of Duke University when they asked her: What competencies should we have in order to become professionals in the field of sustainability? “First of all”, she answered, “you need to have courage … you need to be persistent. The second is: be willing to fail” … “Think of this (sustainability – note ours) as an innovation challenge, which means: fail, fail, fail, iterate, iterate, iterate, learn. This is a domain where change is the only constant, and if you are not comfortable with change, if you are not comfortable with being a learner, reinventing yourself, reinventing your team … then you shouldn’t go into it.”177

4.3.4. A summary of Nike’s evolution during 1992-2012, and conclusions

Long-term orientation and balancing short-term and long-term goals

As we have seen in the case study, Nike’s sustainability initiatives were quite numerous.

In order to systematize them, we found it useful to use the Sustainable Value Framework, advanced by Hart and Milstein (2003) and further developed by Hart (2010); it is adapted in figure 4.3.4.1 below to serve subsequently for the mapping of Nike’s actions that were analyzed previously.

The model is based on an extended perspective on value creation and was suggested as a tool of strategic analysis of the directions a company can follow in order to create sustainable value; it links sustainability to the key functions of the company. The model can also help analyze a company’s sustainability-related actions (Senge et al., 2008).

176 CRR Nike (2013)
177 Jones (2011)
There are two dimensions in the model, representing the sources of creative tensions in organizations. The vertical axis is tied to the time horizon of company decisions and captures the tension between the need to manage short-term goals while simultaneously generating prospects for future growth. The horizontal axis reflects the need to strike a balance between an organization’s requirement to develop and reinforce distinctive skills while concurrently staying open to new perspectives and adopting new business models and technologies called for by the changing external environment. The combination of these two dimensions produces a matrix with four distinct quadrants of performance, essential for generating shareholder value (Hart and Milstein, 2003, p.57).

The lower-left quadrant focuses on aspects of performance, such as reducing costs and risk, which are internally oriented and relevant in the medium and short term. The lower-right quadrant has in view a similar time horizon just that it looks outward by targeting the relevant stakeholders of the company.
Moving now upward on the time axis toward longer time horizons, the upper-left quadrant shows that companies need to develop competencies that will enable future business growth. The upper-right quadrant emphasizes that developing a sustainable business strategy is inextricably tied to society’s aspirations, which should be solicitously considered.

Credible expectations for future growth are key to the generation of shareholder value and depend on the company's ability to articulate "a clear vision of what its future growth path will be" (ibid., p. 58).

Companies that manage to balance the coverage of all four quadrants will be able to generate shareholder value in a sustainable manner over time owing to their ability to articulate a clear vision of what the path to future growth is, and due to their holistic approach consisting in stakeholder engagement. If company initiatives address only some of the quadrants, opportunities will be missed, which will result in reduced performance and, ultimately, in the failure to create long-term value (Senge et al., 2008).

In figure 4.3.4.2 further down, Nike’s most important initiatives described in the case study are mapped onto the sustainable value framework178.

The mapping reveals a balanced targeting of all quadrants of the Sustainable Value Framework: the corporation engages in both short-term and long-term oriented projects, showing at the same time consideration for operational performance and organizational development, on the one hand, and concern for societal and environmental issues, on the other hand.

It is likely that the situation presented in figure 4.3.4.2 is the result of the continuous strategic guidance on the road to sustainability, at least since 1998, a landmark year [N1, p. 176]. We believe that the setting up of the Corporate Responsibility Committee of the board [N44, p. 178] in 2001 was also instrumental in providing that kind of guidance, since the Committee was meant to be the steward of the board’s long-term direction179. This role seemed to have been crucial for resolving problems such as the ones discussed in section 3.3 of this book, in order to enable the company to reach a balanced conduct in managing pressing short-term objectives without losing sight of or veering off track in terms of its long-term objectives and its sustainability.

178 Winslow (2009) was used for corroborative information.
179 Paine (2014b)
The chronology of the events, apparent from figure 4.3.4.2, shows that the actions in the two bottom quadrants were, as we believe, used as stepping-stones for developing a strategy by which sustainability considerations were integrated into the business strategy and, thus, enabled the company to reach stage 4 (see figure 1.4.2.1) in its progression toward sustainability. Also, the adoption in 1998 of The Natural Step principles was essential for Nike’s strategic orientation toward sustainability since The Natural Step is in itself a strategic thought framework.

We found two explanations for Nike’s rationale for approaching sustainability strategically as early as the 90s. One is that after almost 30 years of growth, Nike faces stagnant sales in western markets, where it generates 83% of its total revenue. In addition, both the pressures from the civil society during that period [N4, p. 177], [N5, p. 177] and the increased risk of its operations in Asia, resulting from the financial crisis in that
region, are threatening the profitability of its business model, based on outsourcing\textsuperscript{180}.

Therefore, it is possible that Nike was looking for new ways to grow and even for new business models to ensure its future prosperity over the long term [\textbf{N40, p. 176}]. This demonstrates the capability of the management team to handle the creative tension between the current reality and the desired future, and sets the stage for the subsequent evolution toward becoming a sustainable business.

Another one, as documented in company reports, attributes Nike’s environmental proactive attitude to the scenario planning sessions conducted during the early 1990s [\textbf{N41, p. 175}]. This explanation is credible because scenario planning is a tool for organizational learning at the strategic level\textsuperscript{181}. At the same time, the literature on organizational learning acknowledges it as a fundamental tool of the discipline of mental models (Senge et al., 1994; Senge, 2006).

The two explanations are not mutually exclusive, but rather complementary. Given the further unfolding of events, they both demonstrate how important it is for company management to develop the capability to identify, question and, if need be, change its mental models regarding the ways of doing business. This enables it to examine alternative solutions to the current business model.

This finding provides reasons to support the likely importance of the disciplines of personal mastery and mental models for building business sustainability (a connection that was anticipated theoretically in Chapter 3 of this book). Managers’ ability to contemplate alternative solutions, which is favored by the practice of the two disciplines, supports the firm’s evolution toward sustainability because it contributes to reduce or eliminate one of the limiting factors of this evolution, namely not understanding the relationship between the socially responsible behavior of the company and its long-term prosperity (section 3.2 and the model in figure 3.2.1 refer to the limiting factors).

We will now examine how Nike progressed toward sustainability, how it used the learning processes and how these contributed to the progress; the study will follow the three time periods of the analysis conducted earlier.

\textsuperscript{180} WRI (2002)
\textsuperscript{181} Shell was the first to use it (deGeus, 1988).
The Social Challenges period: 1992-1998 (covered in section 4.3.1)

Our first impulse was to name this period the "reactive period". However, we didn’t do it because we believe Nike, Inc. was positioned, especially during the first part of 1992-1998, at different stages along the evolutionary process in figure 1.4.2.1 in terms of addressing the social, respectively the environmental aspects.

From the standpoint of the environmental pillar of sustainable development, the corporation finds itself predominantly at stage 3, Beyond Compliance, the Reuse-a-Shoe program being the proactive component of its sustainability initiatives.

With regard to the social aspects, the company, through its managers, is positioned only in stage 1, Non-Compliance, stuck in an attitude of denial, according to statements made in that period [N33, p. 177] and as shown by subsequent findings of Vice President Hannah Jones [N6, p. 178]. Basically, the logic used by the company was self-referential, characteristic of O-I organizations, described in section 2.1.1.5. As discussed in that section, actions induced by the model I theories-in-use encourage single-loop learning and discourage double-loop learning (up to the point of making it impossible). In such an environment, individuals tend to externalize the responsibility for error and transfer it to others and/or to the system (Argyris, 1991; Argyris, 2000).

This case confirms the theoretical considerations discussed in section 1.4.1, according to which an organization can be at different stages of advancement toward sustainability in terms of the social and environmental aspects.

Thus, as far as the social aspect of sustainability was concerned, company managers seem to have had difficulty changing the paradigm of business and of what their responsibility to workers in suppliers’ factories was. It is possible that this happened not because of not understanding the problems, but rather because of a failure of “political will”, as at stake was the very source of profit, i.e., the reduced production costs coming from outsourcing.

On the other hand, Nike has conducted, as we have seen already, scenario planning exercises in the realm of environmental aspects since the early 1990s. This led to the development of the discipline of mental models in the organization. This discipline has proven useful, as it has most likely helped the company adopt an environmental attitude that propelled it to the Beyond Compliance stage.
We also note senior management’s skill to encourage the generation of and to capture the ideas that can lead to the formation of the emergent component of the company strategy [N2, p. 176]. [N3, p. 176]. We will examine this ability in more detail in the next section.

The Business Integration Phase: 1998-2005 (covered in section 4.3.2)

The finding presented in the previous section that Nike benefited from continuous strategic guidance, based on vision and principles, in all the periods of analysis shows that such guidance is needed and useful at all stages of evolution toward sustainability, including, of course, the Beyond Compliance stage 3.

We should make the remark, though, that remaining at stage 3 for a while is not necessarily a strategic management shortcoming, but rather an indication of the need to reinforce the changes called for by the strategy. As both Winslow [N18, p. 183] and Hannah Jones [N17, p. 187] argue, the company needs such a reinforcing in order to create a solid foundation for the next strategic moves. What we mean by building a solid foundation is not just clarifying the company vision about its own sustainability, but also defining the place of sustainability in the company values and mission. Moreover, a solid foundation can also mean identifying a new business model, with its systems and tools, needed to align the organization to the vision and strategy, and integrating sustainability values into the organizational culture.

As mentioned earlier, the management team of Nike possesses the extremely important capability to provide guidance through vision [N7, p. 181] and to encourage the formation of the emergent component of strategy. However, Nike leaders themselves underwent an evolutionary process in order to develop this capability, which is essential for the success of the sustainability effort. A good case in point is the change in the thought framework of Darcy Winslow and her endeavor to persuade top corporate management to share her new views on how to truly support sustainability [N9, p. 182]; she is appointed in 1999 to head the Sustainable Business Strategies global division. This management capability is characteristic of the organizational learning paradigm (Mintzberg, Ahlstrand and Lampel, 1998; Senge, 2006; Saint Onge and Armstrong, 2004).
At Nike there is agreement that the formation of the sustainability strategy is an iterative continuum\textsuperscript{182} and that the strategy and strategic goals are under continuous development\textsuperscript{183}. This process is based on what managers learn from their experience and actions as well as on the initiatives coming from all organizational levels [N9, p. 182].

The same Winslow case [N9, p. 182] evidences the role and importance of the interaction between the disciplines of shared vision and personal mastery of the learning organization for inducing the involvement and proactivity of the people in the organization (Senge, 2006), and for generating the emergent component of the strategy. We anticipated the role and importance of the two disciplines in section 3.4 of this book.

It is also significant to underline the way Winslow conducts the project of involving people in sustainability-related activities [N10, p. 183] in order to promote the required organizational changes. By discussing openly with them, she comes to realize that it is innovation that "turns them on" collectively [N11, p. 183], and decides to offer them a positive vision that would connect with what they feel and truly believe in [N12, p. 183].

Driving change in the way the company addresses sustainability entails a systems perspective as well, as the entire approach to the Team Shambhala program shows clearly [N13, p. 183]. Structure determines behavior, states Senge (2006, p.40), and the structure in human systems is subtle, it includes relationships and interconnections between the members of the system. As a result, "the only effective way to change the team's behavior is to identify and modify this web of interconnections and relationships" (Slobodnik and Wile, 1999, p.2). Offering a compelling, challenging vision, which the involved individuals could connect with their own vision, determines them to move, as elements of the system, voluntarily in the desired direction and to engage willingly in successful change.

In the case of Team Shambhala [N13, p. 183] the change occurs through the same interaction between the positive vision offered by the management and the

\textsuperscript{182} The report for 2004 (CRR Nike, 2004) states: "In our FY01 report, we articulated a set of long-term goals related to the environmental aspects of our products, including zero toxics, zero waste and 100 percent closed loops. Over the last three years, we tested the relevance of those goals within the business and with external stakeholders, and reframed them based on feedback and practical experience”.

\textsuperscript{183} Hannah Jones declares in the interview to Ethical Corporation (Webb, 2011) that Nike’s sustainability strategy evolves through iterations, testing and modification, if necessary.
individual visions of people, through team learning and changing sustainability-related mental models, through developing systems thinking and empowering people to act in projects in real-time and to make timely decisions about how to achieve business goals [N14, p. 184]. In this program, improving people’s skills to address sustainability and promote change occurs by learning and practicing the principles and tools of organizational learning and systems thinking [N15, p. 184].

At the same time, the shared vision of the participants plays an important role in keeping them together in action and motivating them to spread the "Shambhala" ideas and behaviors company-wide. Their shared vision gives rise to the 11 Maxims [N16, p. 185], which will be later adopted by the entire organization and have guided the activity of Nike employees and embodied the Nike spirit ever since.

The usefulness of systems thinking is also apparent from the way the company has resolved the contradiction between the Code of conduct and the system of bonuses awarded to the staff in charge of suppliers [N8, p. 179]. This is important for achieving “strategic fit” (Porter, 1996) for the entire supply chain, as discussed in section 3.5 of this book.

A development worth observing is how the role of the Corporate Responsibility Committee of the Board of Directors was perceived and has evolved as the systems understanding of the committee’s team progressed from its establishment in 2001 [N44, p. 178] until 2011 [N45, p. 188]. Statements of Jill Ker Conway, the head of this committee, confirm the facts 184. In its early years, the Committee dealt more with "putting out fires" – reacting to individual incidents and events, such as major irregularities in occupational health, human rights and environmental protection. But as Nike deployed new, sophisticated systems for monitoring the compliance of contractors with its Code of conduct, the Committee got more involved in monitoring these systems. Then, as it became clearer and clearer that many incidents and events were, actually, the result of broader patterns, the Committee’s views and actions came along.

In our opinion, this development confirms the findings in section 3.5 (represented in figure 3.5.1) about how management thought frameworks change in line with the evolutionary process of understanding better and better the systems patterns and structures underlying the events.

184 Paine (2014b)
Systems thinking proved useful for Nike, over the entire period of the case study, for understanding its broader business environment and for finding methods of changing rules, systems and collective mental models at the industry level. In our view, it is the systems thinking that drove Nike to continuously advocate, as of 2001, for industry-wide transparency and cooperation in matters not related directly to competition [N46, p. 180], [N47, p. 186]. Mark Parker, CEO of Nike, declares in 2012: “Nike is a large company by most standards, but our ability to influence meaningful change at the systemic level has limitations. It is absolutely crucial that we work with other players to prompt real, sustainable system change.”

We can conclude that our empirical results support the theoretical considerations that we introduced through the model presented in figures 3.6.1 and 3.6.2, by which we anticipated the role of shared vision, personal mastery, systems thinking and team learning in developing company strategy and in generating and capturing the emergent component of the strategy formation process. As the analysis of the 1998-2005 period shows, those characteristics of a learning organization can underlie the strategic capability and reaction speed of a company, which is in tune with the theoretical reflections advanced in sections 3.3 and 3.4.

The Positive Vision period: 2005-2012 (covered in section 4.3.3)

In our opinion, in this last period of analysis Nike moved to stage 4 of sustainability – Integrated Strategy, in the model in figure 1.4.2.1 – and is heading toward stage 5, Purpose/Mission. Sustainability is becoming a key element of the corporate vision and strategy [N22, p. 188]. As seen from the developments after 2012, it keeps the same orientation and makes steps to get even closer to stage 5.

This becoming entails a major organizational change [N19, p. 187], not only in terms of strategy but also in the structure and culture [N24, p. 189], [N29, p. 189]. It is noteworthy that Nike management understands the important role of vision [N23, p. 188] in energizing and guiding the organization during a major change. An effort is made to create a positive shared vision [N30, p. 191] for the company’s sustainable future; the formulation of the vision should move away from terms like "sustainability" and "responsibility" and adopt instead the concept of a "Better World". The theoreticians of systems thinking and organizational learning do, in fact, emphasize

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185 Kennedy (2012b)
186 Vogel (2011)
how necessary and useful a positive sustainability vision is for a radical
transformation. A transformation toward sustainability requires an inspirational vision
(Meadows, Randers and Meadows, 2004; Ehrenfeld, 2004), while the words
"sustainability" and "responsibility", which suggest "survival", respectively
"obligation", fail to be inspirational (Senge, 2009).

Besides a proper choice of wording, other actions were taken in order to
create and share a positive sustainability vision, and to communicate a new
perspective on what business sustainability means and how to work toward it. For
instance, the new designation of the corporate social responsibility function, which
becomes Sustainable Business & Innovation [N20, p. 187], reflects its changed role,
from "policing" to a designer of strategy, as underlined by Vice President Hannah
Jones [N21, p. 188]. Or, the approach taken in the Nike Considered project is
another confirmation of the painstaking effort put in by the management: a video
about the sustainability vision was presented directly to the design teams and, then,
an instant feedback system was set up to help designers keep on the right track
[N30, p. 191]. Furthermore, when Nike changed its system of dealing with
contractors [N43, p. 190], the toughening of the requirements, by demanding a
responsible conduct and a firm commitment to sustainability, was doubled by a new
policy of longer-term agreements with fewer partners, and communicating an
inspirational “vision of a greater good” [N42, p. 189].

We remark again the effort made by the company to create a shared vision
across the organization by capturing the employees’ personal visions for Nike’s
sustainable future and for their role in creating that future; the shared vision is
supposed to capture also what the employees have learned so far about
sustainability. In order to achieve all these, the company resorted to the processes of
Externalization and Combination187. Externalization, by which people make explicit
what they know and believe, was implemented through team learning [N25, p. 189]
and challenging mental models, and through "scenario planning" [N26, p. 189].
Combination, by which different types of explicit knowledge are blended to give rise
to new knowledge, which is then disseminated in the organization, was carried out
through exercises specific to The Natural Step, i.e., "scenario planning" and "the
funnel" [N27, p. 189], and led to a shared vision of how business growth can be

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187 Externalization and Combination are knowledge conversion modes in the knowledge spiral, presented in
figure 2.2.3.4.1. Our theoretical model, described in figures 3.6.1, includes the knowledge spiral.
decoupled from the scarcity of natural resources and how to build a more equitable world [N28, p. 189]. These undertakings by Nike are consistent with the theoretical considerations (discussed in section 3.4 and anticipated by our proposed model in figures 3.6.1 and 3.6.2) about the formation of strategy and its relation with the characteristics of a learning organization; they also confirm the importance of the emergent strategy for sustainability.

As illustrated by the Nike Considered Design project [N34, p. 191], however, vision alone is not enough, albeit co-created as described above. In order for the vision to become operational and generate results, innovations in infrastructure had to be made [N31, p. 192] and systems and tools had to be put in place [N32, p. 192].

This is consistent with a framework proposed by Senge et al. (1994)\footnote{Senge et al. (1994) advanced the Learning Organization Framework, which shows that, in an organization, things have to happen in three spheres of activity, called “domains”, in order to create organizational learning: the “Domain of results”, “Domain of action” and “Domain of enduring change”. In the “Domain of results” clearly defined, motivating end results are envisioned, aimed at achieving company’s business performance; without them learning does not take place. In the “Domain of action” people plan and do things in order to achieve their desired results. The “Domain of enduring change”, the so-called deep learning cycle, is about pursuing goals in “a way that engages people’s hearts and spirits”.} for building a learning organization; the “Domain of action” part of the framework is schematically presented in figure 4.3.4.3 below.

The scheme conveys the idea that it is necessary to focus on three architectural design elements: guiding ideas, innovations in infrastructure, and theory, methods and tools. Guiding ideas express what the organization stands for and start with vision, values and purpose without which there can be no sense of direction and no inspiration. Without theory, methods and tools, people can’t develop the new skills and capabilities necessary to follow the direction drawn through the guiding ideas. The management and learning infrastructure meets the challenge of ensuring that people have the resources they need to learn and grow in the process of pursuing their vision, using the methods and applying the tools; it needs to be innovative in order to keep up with the inspiring ideas, and the new methods and tools. The infrastructure comprises elements such as governance (e.g., boards, committees, and lead learning managers), learning technology infrastructure, and alignment processes that align learning needs and strategies.
We believe that Nike’s approach to implementing change toward sustainability, particularly during the Positive Vision period, pretty much parallels the aforementioned framework. Thus, we could identify a definite endeavor of the company to shape a positive shared vision, to create the supportive organizational structure and systems needed to pursue the vision and transform it into programs, and to introduce tools for effective and efficient action. This was the case with the Nike Considered Design project \[N34, \text{p. 191}\], and with the new modus operandi of working with contractors \[N42, \text{p. 189}\], \[N43, \text{p. 190}\], to name just two of the initiatives examined in the case study.

### 4.3.5. Nike case study conclusions

Nike, Inc. case was selected because, after a preliminary analysis, the corporation presented the profile of an organization well advanced along the evolutionary process toward sustainability. The theoretical model (figures 3.6.1 and 3.6.2) we developed from our research hypotheses, served as the pattern against which the analysis of the case was conducted (in section 4.3.4) by the pattern matching method. The analysis produced an observed pattern that matched the pattern predicted by the model, thereby supporting the hypotheses of our research.
Thus, the case study revealed that, when a company pursues business sustainability, it is important to adopt a long-term perspective and to provide strategic guidance to all corporate responsibility actions. It is equally important for the top management of the company to possess the capability to encourage the surfacing of ideas from within the organization and to incorporate them into the emergent component of company strategy.

The case study also confirmed the role of the characteristics, tools and strategies of the learning organization paradigm in preventing or overcoming internal limiting factors (illustrated in figure 3.2.1) that hinder company actions targeting sustainability.

To conclude, it is apparent from the case study that advancing towards the learning organization paradigm shapes a framework of action that supports company endeavors to build business sustainability.
5. WHAT WE HAVE LEARNED SO FAR

In terms of the commitment to sustainability, the two cases we studied in our research are very different, almost antithetical. While Nike is a representative case for our research idea (Yin, 2012), Romtelecom is the opposite, as company CSR initiatives are just at the beginning and, also, traits suggestive of a learning organization only begin to emerge.

Although the two cases are so contrasting, they are yet very similar. Both companies have experienced radical, transformative changes. Nike advances from a corporation that is initially at stage 2-3 on its road toward sustainability (see the model in figure 1.4.2.1) to a corporation that integrates sustainability into its strategy. At the same time, Romtelecom progresses from a giant monopoly toward a markedly customer-oriented corporation, from a fixed telephony service provider to a multimedia service provider.

As already shown, traits of a learning organization appear alongside successful transformations in both cases; in our opinion, building a learning organization underlies those changes.

We believe, however, that the differences between the two cases are equally relevant to our study. The difference comes, primarily, from the magnitude of the transformation – at least in terms of managerial mental models. If Nike’s transformation involves a radical, innovative paradigm shift (Nike being recognized as a pioneering company in many areas), Romtelecom’s transformation occurs within the customary mental framework of doing business and creating value. This points out that, as discussed in Chapter 1, while the evolution from stage 1 up to and including stage 3 is possible with the commonly practiced managerial mental models, a jump to stage 4 requires a radical paradigm change.

As concluded in section 2.3, double-loop learning appears to be essential for evolving toward the more advanced stages of sustainability, especially stage 3 and higher, requiring a change in the governing variables that dictate how to design and manage the business. As our findings reveal, organizations remaining stuck at stage 1 (Non-Compliance) or 2 (Compliance) seem to correspond to O-I model organizations, with limited learning (see section 2.1.1.5).

An organization will need to develop the dimensions of a learning organization if it is to transit to organizational model O-II (see section 2.1.1.6) and progress
toward the superior stages of the sustainability path. This is so because moving to the O-II model enables double-loop learning, leads to a reduction in individual and organizational defensiveness, and promotes reconsideration of externalities. Without such a development the organization is likely to stall either at stage 1 or 2 mentioned above. This view is sustained by the Nike case. During the first part of the case study the corporation comes across as a defensive organization, prone to externalizing all accountability for the social conditions in contractors’ factories. It is only later in the case study when the company realizes that, in order to make progress toward the established goal of becoming sustainable, it is required to do away with defensiveness, and assume transparency about and accountability for environmental and social impacts of its activities.

The Nike case highlights the critical need to think systemically in the struggle for sustainability – understanding the system in which you operate and the ability to redraw its borders so that relevant stakeholders be brought within those bounds. In fact, we are talking about redefining the boundary between externalities and internalities. In this context, the capability for dialogue, understanding transparency as a value and an opportunity rather than a threat\(^{189}\), and a vision shared among all the constituents of the system seem to act in favor of pursuing sustainability successfully (we have seen this novel approach in the revised system of working with suppliers, adopted by Nike in the last part of the case study). Although all these organizational traits need to be developed beyond teams (Senge et al., 2008), we believe that establishing, in the first place, a habit of learning in teams within the company, promotes the skills developed by practicing this discipline also outside the organization.

To add another note, we found that the disciplines of personal mastery and shared vision are probably more important during transformations that call for a transition toward sustainability than during usual changes, since sustainability is a distant goal that keeps getting more distant as the organization advances toward it.

After having tested our hypotheses, we believe that the two case studies we developed and analyzed through the pattern matching technique support the

\(^{189}\) For example, in line with this, Nike gives up on the annual reporting as of 2012 and shifts to real-time reporting on its website [“every day, every moment, every decision reporting model” according to Jones (2011)].
fundamental and the secondary hypotheses underlying our research, and the model we proposed.

The Nike case study also presents evidence that supports our hypothesis and model explaining how an organization could stop at some stage along the evolutionary process toward sustainability; the model used a "limits to growth" generic structure (see section 3.2 and figure 3.2.1). Thus, even though Nike benefited from strategic directing, it halted for a fairly long time at the Beyond Compliance stage. But, as company managers themselves reasoned, this stop was considered necessary for the organization to get to understand what sustainability is and, particularly, what its implications are for Nike. It took some time to change mental models and generate a vision to enable the company to move forward; in fact, as Senge (2006) writes, both processes require time.

Finally, we note that, in the case of Nike, our analysis revealed the existence of a two-way relation between the two development processes, toward the learning organization and toward sustainability. The Romtelecom case suggests a similar situation: company CSR concerns started emerging along with nascent learning organization attributes. Therefore, it is possible that the two processes support each other (the traits of learning organization help the company progress toward sustainability, while moving closer to sustainability reinforces the evolving learning organization). However, if we consider the views of Garvin et al. (2008), it is also plausible that the learning organization and the sustainable organization are two facets of “an organization made up of employees skilled at creating, acquiring, and transferring knowledge” and thus “help their firm cultivate tolerance, foster open discussion, and think holistically and systemically”. “Such learning organizations would be able to adapt to the unpredictable more quickly than their competitors could” and, we conclude, would hold out, therefore, heightened prospects for long-term prosperity, which is tantamount to increasing their chances of success in the pursuit of business sustainability.
APPENDIX R.1.

THE HISTORY OF ROMTELECOM S.A.\textsuperscript{190}

\textbf{1930:} SART\textsuperscript{191} is founded as a corporation, with a 90% investment in its stock coming from ITT (USA).

\textbf{1949-1989:} The company, after nationalization, is integrated as a division into The Ministry of Posts and Telecommunications; investments in network and technology waned.

\textbf{1990:} ROM-POST-TELECOM is founded as a self-managed state-owned company in telecommunications, postal services and broadcasting.

\textbf{1991:} ROM-POST-TELECOM is reorganized, telecommunication services being transferred to Romtelecom, founded as a state-owned monopoly. At that time, the penetration rate of telephone services was 9.5%, the technology was analogue, manual phone exchanges were prevailing in rural areas, and over 3,000 communities were not connected to the telephone network.

\textbf{1997:} Romtelecom is turned into a quasi-public corporation and is readied for privatizing.

\textbf{1998:} OTE acquires 35% of Romtelecom stock, plus an additional 16% of the voting rights in the ordinary general assembly of the shareholders as usufruct – for a five year period – in exchange for 675 million USD; it also obtains the right to appoint Romtelecom’s CEO. The State grants the company monopoly over fixed-line telephony (local, long distance and international) until December 31, 2002.

\textbf{2003:} The second stage of privatization takes place, turning OTE into the majority shareholder with 54.01% of the stock, for 273 million USD. The Romanian State holds the balance of the shares, through the Ministry of Communications and Information Society. Romtelecom’s monopoly ended on January 1, 2003; the telecommunications market was liberalized.

\textbf{2008:} Deutsche Telekom A.G. acquires 25% of OTE’s stock and gains control over the company management.


\textsuperscript{191} The meaning of “SART” is “The Romanian Anonymous Telephony Company”; the “anonymous” denomination indicated, at that time, a business organized as a corporation.
2011: In several successive stages, Deutsche Telekom A.G. reaches to 40% OTE ownership, thus becoming the main shareholder of the Greek telecom Group.

2012: Romtelecom S.A. and the mobile telecommunications provider Cosmote Romania S.A. move closer to each other, thus paving the way toward a business model based on the fixed-mobile communications synergy. Talks are underway between OTE and the Romanian government for the merger of the two operators.

2013: The operational integration of Romtelecom S.A. and Cosmote Romania activities is launched, and synergies that would benefit both entities are identified. On April 1, 2013, Nikolai Beckers is appointed CEO of both Romtelecom and Cosmote Romania with the mandate to create the number 1 complete telecom and entertainment provider in the Romanian market. Starting on August 1, 2013, five new management positions were created to jointly coordinate Romtelecom and Cosmote Romania activities. By October 1, the entire executive team has assumed joint responsibilities for the integration process.

2014: Romtelecom’s Board of Directors approves the rebranding of the company under a brand of Deutsche Telekom. As of September 2014, Romtelecom S.A. changes its name to Telekom Romania Communications S.A. and will operate under the Telekom Romania brand. Telekom Romania is an umbrella telecommunications brand, under which Telekom Romania Communications S.A. provides fixed-line services and Telekom Romania Mobile Communications S.A. (formerly Cosmote Romanian Mobile Telecommunications S.A.) offers mobile services.

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192 Events related to Romtelecom’s evolution during the 2012-2014 period are briefly presented in a subsection at the end of section 4.2.3, but are not included in the case study analysis, as explained in the Preface.
APPENDIX R.2.

CORPORATE MISSION, VISION AND VALUES – ROMTELECOM, 2004

MISSION

ROMTELECOM will provide telecommunications products and services that address the needs of Romanian individual and corporate customers. The company will conduct its activities such as to create shareholder value and be a respected member of the Romanian society.

VISION

ROMTELECOM will become the premier telecommunications products and services provider in Romania. Customers will rank company services as exemplary, while employees will rate the company as one of the top five employers to work for in Romania. Finally, ROMTELECOM will match Central European operators in terms of efficiency and profitability.

VALUES

Customer orientation
Customers are not a necessary evil, they are the only reason we exist, whether they are inside or outside customers.

Commitment
We assume responsibility and commit to keeping our promises.

Integrity
We are honest with our customers, suppliers, shareholders and employees.

Respect for the individual
Do unto others as you would have them do unto you, regardless of circumstances.

Teamwork
We work together: when one of us succeeds, we all succeed, and when one of us fails, we all fail.
APPENDIX R.3.

CORPORATE MISSION, VISION AND VALUES – ROMTELECOM, 2008

MISSION
Deliver promptly reliable telecommunications and entertainment services, which evolve constantly.

VISION
Romtelecom is the service provider that sets standards in Romania, by exceeding the expectations of customers, employees and shareholders by providing the highest quality communications, entertainment and information technology solutions.

VALUES

Customer orientation
Our mission is "The Customer Comes First". Treat your customer the way you would like to be treated. The mission is considered accomplished when you would readily be your own customer.

Commitment
Saying is doing: a promise made has to be a promise kept. Without exception.

Respect
Respect your customers, your colleagues and also respect your work. Show respect to others and it is most likely they will respond the same.

Integrity
In everything you do, you should prove that ethics and business are compatible. Be honest – honesty is rewarded.

Teamwork
Win by working in a team. Celebrate success in the same way. Learn to share with others, learn to trust.

Cost consciousness
Spend as if you were using your own money. Keeping costs under control is the simplest way to have a healthy business and a good job.

A win - win approach
Romtelecom business has 2 winners:
– Our partners: customers, suppliers, third parties, unions and any other organization that has to do with Romtelecom, and
– Ourselves.
APPENDIX N.1.

EXAMPLE OF A BLOG POST IN FAVOR OF THE NIKE BOYCOTT

JUST DO IT!

THE NIKE BOYCOTT SPREADS ACROSS ALBERTA

UPDATES FOR 1999

THE NIKE CAMPAIGN LIVES!

Open letter to Nike Shareholders
September 22, 1999

Below find a copy of the press release summarizing an open letter signed by forty organizations, which the Clean Clothes Campaign in the Netherlands attempted to present today to Nike at its annual shareholders conference in the Netherlands. The full letter and extensive background material are available on our website: www.web.net/~msn. Word from the Netherlands is the following as of noon today: "The police have been keeping the protesters far from the entrances where the CCC might have access to the ears of the stockholders. The police would not allow any of the protesters entrance into the meeting even though some are valid stockholders. The police have instead strongarmed the protesters. Thus far the casualties include one injured photographer and four arrested protesters as the Clean Clothes Campaign continues to have its voice heard and to offer an alternative meeting where the stakeholders would meet representatives of unions, consumer, and solidarity groups will offer serious alternatives to existing practices. Also, at the shareholders meeting itself, the open letter will be read to all the people present."

Those of you who are MSM members will soon be receiving a copy of our new Nike flyer

193 http://www.oocities.org/athens/acropolis/5232/
"Would you trust a company that puts its trust in the Indonesian army?", along with our newsletter, which was mailed yesterday. The flyer will be available for downloading from our website in the next couple of days. If you're not an MSN member and would like to receive a hard copy by mail please let us know.

Lynda Yanz, Coordinator
Maquila Solidarity Network/Labour Behind the Label Coalition/
Popular Education Research Group
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E-mail: perg@web.net

Press release – Wednesday, September 22
For Immediate Release:
Nike Annual Shareholders' Meeting, Hilversum, Netherlands:

International Human Rights Community Condemns Nike's Inaction on Labour Rights Abuses
Nike's refusal to end labour abuses in its suppliers' factories will be documented today in an open letter signed by more than 40 human rights and labour groups from around the world. The letter will be presented to NIKE's Annual Shareholders' meeting in Hilversum, Netherlands.

On-site investigations reveal evidence of:
– physical and verbal abuse of workers in Nike factories in Vietnam and El Salvador;
– the Indonesian military being employed by a Nike contractor to intimidate workers during wage negotiations;
– Nike refusing to reinstate Vietnamese workers who have been humiliated and dismissed for talking to journalists;
– workers being sacked for trying to organise unions in Nike factories in El Salvador, Thailand and Indonesia;
– severe fire hazards in a Nike factory in China.

The joint letter was motivated by frustration at Nike's continued failure to match its rhetoric with action.

"NIKE responds to its human rights abuses of its workers with cynicism, denial and concealment," says Bob Jeffcott of the Toronto-based Maquila Solidarity Network. "Personally, I am very angry with Nike for their endless lies. The reality of what is going on should be disclosed to the world," says Alice Kwan of the Hong Kong Christian Industrial Committee.

"Nike is a great pretender. They know the reality in Indonesia, they know it well, but forever they always keep in silence; they never show their concern for the labour situation or condition", says Ara Tibi from the Indonesian human rights group SISBIKUM. The letter calls on Nike to reinstate all workers who have been fired for organizing unions or talking to journalists; ensure workers are paid a living wage for a standard forty hour week; publish the addresses of all its suppliers factories and put in place a credible system for monitoring conditions in those factories.

Representatives of the Clean Clothes Campaign in the Netherlands will attempt to read the letter aloud during Nike's Shareholders' Meeting. The meeting is being held in Nike's new European headquarters in Hilversum, the Netherlands starting at 4:00 pm, Wednesday, September 22. The letter and a list of international media contacts can be found on the Maquila Solidarity Network website.
APPENDIX N.2.

A GRAPH OF THE NUMBER OF UNFAVORABLE REFERENCES TO NIKE IN THE MASS MEDIA, 1992-2002

Unfavorable mass media mentions
Major world newspapers

Source: Locke (2002)
APPENDIX N.3.

NIKE’s 11 MAXIMS\textsuperscript{194}

We’re a company of storytellers, and we mine our history to give us the insights about how we will think about the future. We have a set of company-wide maxims – 11 principles – that guide us. Together, they embody the spirit of Nike:

1. It is our nature to innovate
2. Nike is a company
3. Nike is a brand
4. Simplify and go
5. The consumer decides
6. Be a sponge
7. Evolve immediately
8. Do the right thing
9. Master the fundamentals
10. We are on the offense – always
11. Remember the man (\textit{The late Bill Bowerman, Nike cofounder})

\textsuperscript{194} CRR Nike (2012, p. 72)
APPENDIX N.4.

THE POSITION OF THE SUSTAINABLE BUSINESS & INNOVATION FUNCTION IN THE ORGANIZATIONAL STRUCTURE

DEDICATION TO & ACCOUNTABILITY FOR SUSTAINABILITY RUNS ACROSS THE COMPANY

NIKE, INC.'S MANAGEMENT FRAMEWORK STRIVES TO ENSURE EXECUTIVE ACCOUNTABILITY FOR CORPORATE RESPONSIBILITY ACROSS THE COMPANY

NIKE, INC. BOARD OF DIRECTORS

CR COMMITTEE OF THE BOARD OF DIRECTORS

CEO

President Nike Brand

Pres. of Direct to Consumer

Pres. of Nike Foundation

VP Design

VP Global HR

VP Global Ops & Tech

VP Product Engines

VP Product Creation Innovation

VP Sourcing & Manufacturing

VP Category + Marketing

VP SBBI

VP Strategy

VP SBBI R&D

VP SBBI Brand

SUSTAINABLE MANUFACTURING & SOURCING

Business Integration

Mobilize

LAB

SBBI Affiliates

CEO Hurley

CEO Umbro

CEO Converse

CEO Cole Haan

VP Ops

195 CRR NIKE (2011)
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