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IMPLEMENTING STRATEGIC CHANGES TO GENERATE SUSTAINABLE COMPETITIVE ADVANTAGE

Rubén Llop and Iñaki García-Arrizabalaga

ABSTRACT

This study examines fifteen business cases, focusing on change management in ten countries on three continents between 1996 and 2007. The companies are from different sectors (industrial and services), sizes (from 30 to 10,000 employees; from 1 million euros turnover up to 1,000 million euros), and different cultural and ethnographic backgrounds. The research, based in case studies and action research, introduces a model to implement strategic change in order to generate sustainable competitive advantage in companies under situations of deep change or crisis. From the conceptual point of view this model breaks some of the basic principles of strategy formulation. The model does not begin with a strategic diagnosis that influences the implementation of planned strategic decisions. The model begins instead after the detection of a need for deep strategic change, and forces outside the organization have already determined some of the required changes (market recession, for instance).

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The model is also atypical regarding the basic principles of implementing strategic change, because existing literature ignores competitive advantage during crisis management, probably because the firm's executives assume that the firm has no competitive advantage, and only after the implementation of the required changes will conditions exist to create a competitive advantage. Nevertheless, the model introduces competitive advantage as a central element when managers implement change, and takes the long-term strategic requirements into consideration without forgetting the challenge for short-term management brought about by deep crisis.

Keywords: Crisis management; strategic change; sustainable competitive advantage

STRATEGIC PLANNING AND CRISIS MANAGEMENT

Strategic planning and crisis management generate opposing approaches. Considering the first approach, strategic planners consider longer periods of time both in analysis and execution, and consider the existing business environment as relatively stable within a given period. Strategic planners analyze the internal resources, the external requirements, define specific action plans and mechanisms to control the evolution of these defined plans, expend time and resources to define vision and missions, balanced score cards, ratios, and gap closure plans. Strategic planning works from an established starting point and, from different perspectives in their analysis, identifies a goal and an ending point and the way to reach that goal (Kaplan & Norton, 1996; Porter, 1980).

The possibility to create a sustainable competitive advantage is only considered within the strategic planning approach (Porter, 1985). Strategy formulation is classifiable and has been viewed from different perspectives over the last decades (Mintzberg & Lampel, 1999). However, no matter what view of strategic planning is espoused, the general comment above holds true.

On the other hand, when one considers the change and crisis management literature, the approach is completely different. Researchers and managers in crisis mode invariably focus only on survival. Only short-term actions occur in order to arrive at the next corner and, after arriving at that corner, they then have to focus on the next break point (Kotter, 1996;

Kotter & Cohen, 2002). Naturally enough, creating a competitive advantage receives little, if any, mention in the crisis management literature.

Thus, it seems as if managers are either strategically reflecting, planning, in a relatively stable business environment, or they are in survival mode during a crisis.

MANAGEMENT IN EXECUTION

From a conceptual point of view our research defies some of the basic principles of strategic formulation. Our investigation does not begin with a strategic diagnosis that determines the strategic decisions to be implemented. It begins from an already-detected need for a deep strategic change; due to crises the businesses are already experiencing. The model we suggest is also atypical regarding the basic principles of implementing strategic change. While existing literature ignores competitive advantage during times of crisis management — probably because it is assumed that only after the implementation of the required changes will there be appropriate conditions to create one — in the model proposed here competitive advantage is a central element in the implementation of strategic change (Llop & García-Arrizabalaga, 2011).

Therefore, in our research we have to cope with "management in execution," where theories must be useful for the companies to survive. It is on this specific approach that our research is focused. As Beer, Voelpel, Leibold, and Tekie (2005) describe, companies need a strategic approach that fits with the existing external environment and with the internal resources, capabilities, and knowledge. But companies also need to adapt to and cope with the changing environment, and this requires a level of preparedness in order to achieve the goal of having strategy, action, and reality aligned.

The focus of managing in execution, and our proposal to create a sustainable competitive advantage through managing change and crisis business situations, stands upon a number of theoretical pillars. First are the approaches of permanent learning and acting (Garvin, 2000, 2002), and creating new knowledge (Nonaka, 1991, 1994; Nonaka, Peltokorpi, & Tomae, 2005; Nonaka & Toyama, 2002, 2003; Nonaka, Toyama, & Nagata, 2000; Senge, 2006; Senge, Scharmer, Jaworsky, & Flowers, 2005). Second, is the idea of building up new capabilities (Helfat, Finkelstein, Mitchell, & Teece, 2007) through teamwork (Katzenbach & Smith, 1993)

and lean management of key processes (Womack & Jones, 1996). Finally, the integrated approach of how to overcome breakpoints (Strebel, 1992), and breaking some existing rules while creating new game rules (Buckingham & Coffman, 1999) in learning companies (De Geus, 1988, 1998) using disruptive strategies (Christensen, 2003) are all part of our integrating research and the derived model.

RESEARCH METHOD

Our research is based on three approaches; qualitative, case study, and action research. According to Rodríguez, Gil, and García (1996), when a qualitative research methodology is used the researchers have to collect and use very different materials and kinds of information in order to describe a problematic situation. The approach needs to be holistic, the tools are not standardized and the researchers themselves are the key measurement instruments. Following the same idea, Hernández, Fernández-Collado, and Baptista (2006) note that the researchers start examining a given social reality and develop a theory consistent with their observations. The hypotheses are generated along the process, and are refined with new data collection and/or obtained results. The methodology is flexible and typically does not involve statistical analysis.

Fifteen business cases are studied from this qualitative perspective, in twelve countries on three continents; the cases draw on events that took place between 1996 and 2007. The case study research methodology has been deeply reviewed by Woodside (2010) and widely applied (Woodside, Pattinson, & Miller, 2005). According to Rodríguez et al. (1996), an inductive approach is used in case study methodology. The common aspects of a given reality, the concepts, the hypothesis, or the fundamental theory appear from the interpretation of the data collected for each case study. The case study methodology usually does not look for the acceptance or refutation of previously defined hypotheses, but rather facilitates a holistic comprehension of the phenomena studied. Finally, according to Eisenhardt (1989) and Eisenhardt and Graebner (2007), theory built from a case study can later be generalized and verified.

Table 1 summarizes the cases in the present study. All of the companies have experienced business situations of deep internal or external changes or crisis. Llop (2009) provides a full description of these business cases. Note that in each case one of the researchers has been the company CEO.

Table 1. Iterations and Cases Characterization.

Years	Case	Type of Change	Activity	Size (Mil.)	Country	Owners
1996-1998	1.1	New SBU	Production, sales	€60	Spain	Subsidiary
	1.2	New SBU	Production, sales	€10	Spain/UK	Subsidiary
1999-2000	2.1	Restructuring	Production, sales	£30	UK	Public, London
	2.2	JV Start-up	Production, sales	n/a	UK/Venezuela	Private
	2.3	SBU Sale	Production, sales	£300	UK/USA	Public, London
2000-2002	3.1	New SBU	Production, sales	\$300	USA/Mexico	Public (NY)
2002-2004	4.1	Restructuring	Production, sales	€50	Portugal	Subsidiary
	4.2	Restructuring	Production, sales	€6	Brazil	Subsidiary
	4.3	Restructuring	Stock and sale	€2	Argentina	Subsidiary
	4.4	Restructuring	Stock and sale	€10	UK	Subsidiary
	4.5	Restructuring	Stock and sale	€5	Norway	Subsidiary
	4.6	Restructuring	Production, sales	€1	Angola	Subsidiary
2004-2007	5.1	Privatization	Energy	€1,000	Spain	Public (Lisbon)
	5.2	Merger & Acquisition	Energy	€25	Spain/Portugal	Governmental
	5.3	Merger & Acquisition	Energy	€25	Spain/Portugal	Governmental

These cases were studied over five iterations, in order to define and refine the model of diagnosis (obtaining key information about the business situation), and understand the intervention required to create a sustainable competitive advantage in these situations of deep change or crisis. This iterative approach of observing, reflecting, planning, and acting along a given iteration and, after finalizing the cycle, starting the next iteration is described by Zuber-Scherrit (2001). This approach is shown in Fig. 1.

Finally, the research is based in an action research methodology (Coghlan, 2007; Coughlan & Coghlan, 2002; Eden & Huxham, 1996; Zuber-Scherrit, 2001, 2007), even though expressed through case studies. According to Altrichter, Kemmis, McTaggart, and Zuber-Skerritt (2002), when people reflect and improve (or develop) their own work, combining reflection and action, communicate their findings with other participants, collect data, define the problems or questions to be answered, increasing the learning through the process, then this represents an action research methodology. According to Hernández et al. (2006), action research transforms a given reality through the people involved in those realities assuming their role in the transformation process. This approach completely fits with our research in Management in Execution.

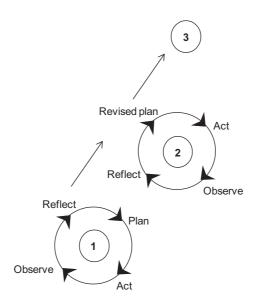


Fig. 1. The Iterative Approach. Source: Zuber-Skerrit (2001).

LESSONS LEARNED

During the first two iterations a set of secondary and primary sources were selected in order to obtain the key information about the business unit, including the executive teams and their individual profiles, the key aspects of the change or crisis processes and the related competitiveness position. The secondary sources used are mainly annual reports, memorandums of board and management meetings (overall, close to 1,200 documents were analyzed). Primary sources involved interviews (more than 350 interviews of 1–2 hours each). Individual interviews were held with board members, management team members, second-tier managers, union representatives, and key customers. Team meetings (more than 150 in total) were held with management teams, departmental leader teams, and production teams. "Climate analysis" exercises (15 enquiries through interviews, written enquires or Internet tools) and "360° exercises" were held with more than 110 executives and managers.

This diagnosis forms the first output of our research. Although critical, there is little time to waste so the process needs to be managed swiftly, taking no more than a quarter of the total time available for analysis and implementation. This diagnostic method leads to the discovery of outputs about key processes, people to be used during the revitalization process of creating the competitive advantage, people to be lost during the early stages of the transformation process, relevant knowledge already existing in the organization, lack of know-how, resources needed, and financial priorities. The interrelationship among the key findings is shown in Fig. 2.

Despite the differences in size, cultural approaches, sectors and type of change or crisis several management aspects appeared in each of the cases and iterations. These key management aspects that allow transformation of the crisis into an opportunity are the second key output from our research. These key management aspects are related to five management fields and are described in some detail below.

Top-Level Support

The first aspect is related to top management, board members, and owners. We note that supporting the CEO through the change and crisis processes is a key factor to help the progress of the company and, if not forthcoming, then to damage all the change processes thus avoiding the creation of any

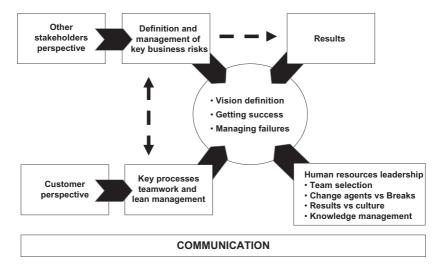


Fig. 2. Diagnosis Model: Key Management Actions and Relationships.

competitive advantage. Either the CEO is fully supported by the board or owners, or he/she has to be immediately replaced.

Human Resources Management

The second key aspect is related to human resources management. After the interviews a management team has to be created. In the studied cases the majority of the selected team members were already inside the organization. Only on a few occasions were external members needed. In other words, the required talent to transform a crisis situation in an opportunity was already inside the stressed organizations. It had to be released and given an opportunity to show, but it was there.

At the same time, through the diagnosis period it was possible to identify the change agents that were able to promote the transformation, and they have to be given the chance to lead the transformation. Brakes were also identified. Nevertheless, the brakes were usually more difficult to identify at first sight. Close focus and analysis were always required by the CEO in order to identify and fire those dangerous individuals from the organization that, instead of helping the transformation to occur, use all their skills and capabilities to abort the transformation process. For the

decision of dismissal a tough, but clear, conclusion was reached; the sooner the better.

In order to better handle the difficult process of identifying and selecting the key human resources during the change and crisis business cases two tools have been developed, defined, and refined along the research journey. From the information and data collected (mainly through the interviews and meetings) the human resources of a given social reality have been classified according a two-by-two matrix (Fig. 3). According to the relative weight (influence) that a given individual could have in a given company (considering both the actual and the virtual organization chart) every member of a collective can be classified as a high-influence individual or lower-influence. After this simple classification the second perspective applies "change agent" or "breaks." In other words, each individual can be classified as one who will help to transform the crisis into an opportunity and to revamp a company or, possibly, if he or she will hinder the process through a lack of commitment, contribution, and a positive approach.

The second tool to analyze and classify the human resources is shown in Fig. 4. This approach refers to the required organizational culture (according to our findings) to create a competitive advantage through a crisis. The culture (values applied to decisions) and the alignment to it, is also key to manage the crisis in our model. The required values are open and honest communication, transparency through all the process, respect for other members of the team, ethical behavior, maintenance of a high level of commitment, and obtaining results. The top management will have to show

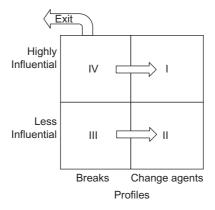


Fig. 3. Change Agents and Breaks.

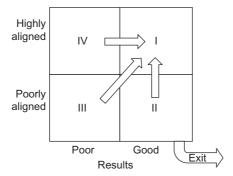


Fig. 4. Cultural Alignment versus Results.

that attaining this culture is a non-negotiable item. When the individuals of an organization are classified according to the alignment to the culture and the results they generate another difficult moment of truth appears. Obviously, the results have to be obtained but, at the same time, how to obtain them becomes crucial. There is only one option, either the results are obtained according to the new culture or the member of the team has to be dismissed.

Multidisciplinary teamwork focused on key processes has been proven as one of the most powerful tools. It enables use of existing knowledge in order to create new understanding about the real problems and solutions and to drastically improve the key performance indicators of a business. The promotion of a company culture based in openness, team success, and honesty (leading by values) is without doubt the main cause of good results generated during a crisis, and a key success factor for the transformation process.

During the transforming processes one must celebrate the small progress that occurs at the beginning of the turnaround. This has also been a key aspect to assist manage the failures that always happen during these early stages of the transformation.

Communication

The third management area that has huge relevance during the transformation process is communication. It has to be omnipresent during the process.

It has to be clear, direct, and honest throughout the whole organization; it must be frequent, defining CEO commitments and achieving them. Clear communications are a key aspect of the required culture in order to transform the crisis into a sustainable competitive position.

Lean Management

The fourth management area that is also shown as a key tool through the transformation processes is the lean management of all the key business processes, from the customer (and other stakeholders) perspective. This is fairly obvious, but does call for the deliberate and sustained attention of senior management.

Financial Control

Obviously, along the transformation route, financial control and obtaining the minimum required results in order to progress towards becoming once again a sustainable business unit, calls for resources and priorities; this is the fifth key management aspect. Nevertheless, it is not the time to implement all the existing financial tools and key performance indicators defined for long-term management and stable environments, as in a strategic planning approach. A few key financial parameters have to be defined and followed, but the focus of the organization has to be placed on the business itself, not on attaining the goals of the finance department or on maintaining overall parent company profit levels.

At this point all these five key managerial aspects come together, to enable the transformation. To manage the existing and create new knowledge, to generate a new strategic approach based in adapting the company to the internal and external requirements, to build up the permanent capability to adapt the unit to the new requirements and react to unexpected events are the bases of the sustainable competitive advantage that this kind of crisis management and leadership can generate. All these aspects of management, that are recurrently found in each of the studied cases, required a level of open, frequent, and honest communication among the entire organization, and that has to be one of the priorities of the CEO during the transformation process.

Fig. 2 shows the first two outputs from our research (the diagnosis model and its information tools, and the identification of the key management priorities), with their interrelations. The third output of our investigation is a model of intervention, and this is now described.

After the first two iterations, a model to manage the crisis situation and to transform it into an opportunity to create a sustainable competitive advantage was defined. The model's implementation gave us the opportunity to refine the model, and to test it in the third and fourth iteration of our case studies.

In the intervention model we describe three temporal phases, and the key management actions that each phase requires in order to successfully negotiate. The first phase is the diagnosis model itself. At the same time all the key management areas and actions that have been described as our second output are executed along with our intervention model and its phases. All of them are shown diagrammatically in Fig. 5.

During the first three months, using all the tools commented upon in the diagnosis model (secondary information analysis, interviews, meetings, climate enquiries, 360° exercises), actions in the five management areas have to be made. Two of them are critical and constant during all of the transformation process; CEO support and communication actions. In the other three management areas (human resources, key processes management and financial aspects) three different periods have been found and defined in our intervention model.

In Phase 1 the Management Team has to be selected and announced. The key business risks have to be identified from all the stakeholders' perspectives and, finally, the key financial constraint have to be clearly identified. These actions have to be performed in the first quarter.

During the first six quarters (Phase 2) the human resources selection has to reach the second-tier management. Change agents have to be identified, selected and empowered while breaks have to be fired. The honest culture based in managing by values has to be in place, and has to be a clear priority even before getting financial results. During this period there is always one, or some, failure situations that have damaged the team and have become serious obstacles to the transformation processes. Carefully managing these situations by balancing management priorities and human care is a key factor in a successful transformation. At the same time, celebrating the small successes and/or progresses obtained during this period is very much appreciated by the teams.

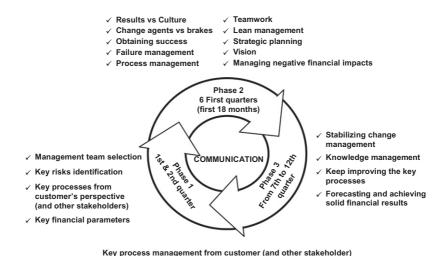
In this Phase 2 the lean management of the key processes through a multidisciplinary teamwork is the base not only for a huge improvement of the

PHASE 1	PHASE 2	PHASE 3	
First and second quarter	Six first quarters (first 18 months)	From 7 th to 12 th quarter	
	CEO SUPPORT		
Management team selection	Results vs. Culture	Stabilizing change	
Sciodion	Change agents vs. Breaks	Knowledge manage- ment	
	 Obtaining success 	mone	
	 Managing failures 		
Key business risk identification	Process management	Keep improving the key business	
from the stakeholders'	Teamwork	processes	
	 Lean management 		
Key processes from customer's perspective			
Key financial aspects	Vision definition	Obtaining predicted and solid results	
	Strategic planning	and solid results	
	Overcome major financial constraints		
	COMMUNICATION		

Fig. 5. Intervention Model.

key performance indicators, but also for the construction of the company culture lead by values. From the financing perspective a short-term strategic plan is built while the very short-term management remains a top priority.

During the final stage, Phase 3, and before restarting the whole process, the CEO has to establish change management as a permanent tool. Teams have to be alert to new signals and anticipate the requirements that the new situation could demand. Both the old and new knowledge have to be expanded throughout the organization. The key processes have to be



perspective through leading the human resources

Fig. 6. The Revamping Cycle.

redefined and improved with a second generation of team members. The financial results will be well forecasted and achieved.

It could seem at this point that the "good old times" have returned, but this is illusory. In all the cases studied, the next wave of crisis or change arrived at the end of a three-year period. The organizations had to start the transformation process from a crisis to an opportunity to create a sustainable competitive advantage all over again. The model then becomes a cycle; the cycle of revamping the organization. This is the fourth major output of our research and is illustrated in Fig. 6.

THE EVIDENCE

All these conceptual findings are backed by the results obtained along the case study research path. The results have been analyzed from three different perspectives. First, the financial and economic results were monitored in order to both find out if the companies survived and to compare these results to those of related business units. The business units studied all obtained superior economical and financial results to comparable business.

Table 2 includes some of the results and Llop (2009) offers detailed results. Table 2 summarizes some of the financial results obtained during the fourth iteration (2002 and 2003). The findings include significant improvements of the business units themselves but also in comparison to other business units within the same industry and market.

The second major aspect that was evaluated and monitored along the research trail was human resource management. As "leading by values" proved such a key factor in all these cases, the human resources climate was evaluated twice in the last two iterations. With this tool the researchers were able to evaluate the evolution of the unit through the process and, at the same time, to compare the relative position of these units with the existing databases of human resources climate monitoring. Both evaluations were extremely positive. As shown in Table 3, the internal evolution reflected improvements from 20 to 30 percentage points. The scores achieved are among the best that the databases are able to show (Llop, 2007, 2009).

Finally, the third measured aspect is the improvements found in the key processes defined in each of the studied cases. These processes were

Table 2.	Financial Results in the Fourth Iteration Case (YTD October
	(€ Thousands)).

	Budget			Difference	Difference	
	YTD'03	2003	YTD'02	YTD'03 versus B'03	YTD'03 versus YTD'02	
Trading proj	fit					
Portugal	2041	1067	-2092	974	4133	
Brazil	173	3	-304	170	477	
Norway	-140	296	-122	-436	-18	
Argentina	-22	-16	-435	-6	413	
Total	2052	1350	-2953	702	5005	
Operating p	rofit					
Portugal	1128	1067	-2842	61	3970	
Brazil	173	3	-304	170	477	
Norway	-140	296	-122	-436	-18	
Argentina	-22	-16	-435	-6	413	
Total	1139	1350	-3703	-211	4842	
Net profit						
Portugal	838	649	-3162	189	4000	
Brazil	750	2	-1758	748	2508	
Norway	-132	172	-57	-304	-75	
Argentina	-363	-20	-465	-343	102	
Total	1093	803	-5442	290	6535	

resources and capabilities?

development?

Are the organization changes an opportunity

for your human and professional

Question	2005	2006	Improvement
Are you informed about the main objectives of your unit?	33.4	65.9	32.5
Does your boss help you in your professional development?	29.0	52.8	23.8
Is your personal contribution appreciated by your boss?	28.4	51.7	23.3
Does good communication and trust between your boss and yourself exist?	43.1	64.9	21.8
Is your boss attitude appropriate in front of the achievements of the team members?	26.8	48.4	21.6
Does your boss communicate clear messages and objectives?	38.2	59.4	21.2
Does the existing relationship with your boss motivate your engagement?	30.0	50.6	20.6
Are you motivated to accept new challenges?	62.9	82.5	19.6
Does the relationship with the other team members motivate your engagement?	57.4	76.9	19.5
Do you know your major individual objectives?	60.1	79.2	19.1
Does your boss delegate according to your	45.9	62.7	16.8

Table 3. Human Resources Climate Enquires Results, Fifth Iteration, 2005–2006 – Percentage of Highly or Completely Satisfied.

identified as the key success factors in each of the business units, taking into considering the different stakeholders' priorities. From the beginning of each case study a measurement of performance was defined for each process. A multidisciplinary team was formed and weekly follow-up meetings were held. In every single case, the methodology of analyzing the situation, defining the problem precisely, listing the alternative actions to be taken in order to drastically improve those processes, defining and implementing an action plan and monitoring the results was applied.

34.4

50.6

16.2

The improvement of the results was always a two-digit percentage and, in several cases, the obtained results were twice or more times the starting value. More than 150 key processes were studied and improved, and some selected results are shown in Table 4 (for more detailed results, see Llop, 2009).

Table 4. Some Examples of the Process Management Improvements Achieved.

First iteration			
Reduction in production items through product rationalization	75%		
 Increase in production productivity 	30%		
- Minimum production lot reduction	From 5 to 1 (80%)		
Second iteration			
- Increase in Production Productivity	From 10 to 30%, depending of different product lines		
Third iteration			
 Increase in production productivity 	30%		
 Production cycle reduction 	From 12 to 3 weeks (75%)		
 On-time deliveries 	From 56% to 93%		
 Bidding time 	From 9 to 3 days (66%)		
 Market share recovery mainly due to customer service improvement 	From 10% to 50%		
Fourth iteration			
- Finished goods stock reduction (in items or SKU)	70%		
- Finished goods stock reduction (in free cash flow generation)	€1 Million		
- Production and delivery time cycle reduction	From 4 weeks to 48 hours		
Fifth iteration			
– New customer in-take	280,000		
 Company culture modification through leading by values, multifunctional teamwork and communication action plan 	See results in Table 3		

CONCLUSION

The research here defines a model to diagnosis a business unit through a change or crisis process. Additionally, we have defined and implemented a model to help managers act through the crisis in order to transform the difficult business situation into an opportunity to create new capabilities to succeed from the existing knowledge (intervention model). Those tools and models have been defined, refined and used in fifteen international business cases of change and crisis. Despite the urgency, the need to change or to handle a crisis we managed to identify a sustainable competitive advantage in those cases while we observed the business.

Our findings are summarized as follows. The companies studied suffered deep changes and crises in short periods. These periods can, however, be used to create the capability to adapt the unit to the new challenges faster than competitors and thus achieve a sustainable competitive advantage. This is attained through combining "leadership by values," increasing existing knowledge, managing by processes, using a teamwork approach, and through lean management of critical systems and processes.

This competitive advantage seems to be sustainable as far as the model is applied as a cycle of revamping the unit continuously, having the business permanently fitting in with the environment. As Fig. 6 suggests, it is a matter of consistently and constantly restarting the adaption process.

LIMITATIONS AND FUTURE RESEARCH

Our research has been limited to 15 cases. Therefore, as this is just a convenience sample, we do not pretend to extend our conclusions directly to other business, change, crisis or management situations or countries. Nevertheless, future research could usefully focus on testing our models and findings (totally or partially) in other business cases or non-profitable organizations, in order to improve results in other fields of business activity.

REFERENCES

- Altrichter, H., Kemmis, S., McTaggart, R., & Zuber-Skerritt, O. (2002). The concept of action research. *The Learning Organization*, 9(3), 125–131.
- Beer, M., Voelpel, S. C., Leibold, M., & Tekie, E. B. (2005). Strategic management as organizational learning: Developing fit and alignment through a disciplined process. *Long Range Planning*, 38(5), 445–465.
- Buckingham, M., & Coffman, C. (1999). First, break all the rules. New York, NY: Simon & Schuster.
- Christensen, C. (2003). The innovator's dilemma. New York, NY: Harper Paperbacks.
- Coghlan, D. (2007). Insider action research: Opportunities and challenges. *Management Research News*, 30(5), 335–343.
- Coughlan, P., & Coghlan, D. (2002). Action research for operations management. International Journal of Operations & Production Management, 22(2), 220–240.
- De Geus, A. (1988). Planning as learning. Harvard Business Review, 66(2), 70-74.
- De Geus, A. (1998). La empresa viviente. Buenos Aires, Argentina: Ediciones Granica, S.A.
- Eden, C., & Huxham, C. (1996). Action research for management research. *British Journal of Management*, 7(1), 75–86.
- Eisenhardt, K. M. (1989). Building theory from case study research. *The Academy of Management Review*, 14(4), 532–550.
- Eisenhardt, K. M., & Graebner, M. E. (2007). Theory building from cases: Opportunities and challenges. *Academy of Journal Management*, 50(1), 25–32.

- Garvin, D. A. (2000). Learning in action: A guide to putting the learning organization to work. Boston, MA.: Harvard Business School Press.
- Garvin, D. A. (2002). General management: Processes and action. New York, NY: McGraw-Hill.
- Helfat, C., Finkelstein, S., Mitchell, W. D., & Teece, D. J. (2007). *Dynamic capabilities:* Understanding strategic change in organizations. Malden, MA: Blackwell Publishing.
- Hernández, R., Fernández-Collado, C., & Baptista, L. (2006). *Metodología de la investigación* (4º edición). México D.F., México: McGraw-Hill Interamericana.
- Kaplan, R. S., & Norton, D. P. (1996). The balanced scorecard: Translating strategy into action. Boston, MA: Harvard Business School Press.
- Katzenbach, J. R., & Smith, D. K. (1993). The wisdom of teams: Creating the high-performance organization. Boston, MA: Harvard Business School Press.
- Kotter, P. J. (1996). Leading change: Boston, MA: Harvard Business School Press.
- Kotter, P. J., & Cohen, D. S. (2002). The heart of change: Real-life stories of how people change. Boston, MA: Harvard Business School Press.
- Llop, R. (2007). La responsabilidad social corporativa en épocas de cambio y crisis. *Harvard Deusto Business Review*, 158, 40–49.
- Llop, R. (2009). Creación e implementación de un modelo de diagnóstico y un modelo de intervención en situaciones empresariales de cambio y crisis. San Sebastián (Tesis Doctoral).
 San Sebastián, Spain: Universidad de Deusto, Facultad de Ciencias Económicas y Empresariales.
- Llop, R., & García-Arrizabalaga, I. (2011). Using change and crisis management as an opportunity to create a sustainable competitive advantage. In E. Kaynak & T. D. Harcar (Eds.), Advances in global management development (Vol. 20, pp. 552–559). Hummelstown, PA: IMDA Press.
- Mintzberg, H., & Lampel, J. (1999). Reflecting on the strategy process. *Sloan Management Review*, 40(3), 21–30.
- Nonaka, I. (1991). The knowledge creating company. *Harvard Business Review*, 69(November–December), 96–104.
- Nonaka, I. (1994). A dynamic theory of organizational learning creation. *Organization Science*, 5(1), 14–37.
- Nonaka, I., Peltokorpi, V., & Tomae, H. (2005). Strategic knowledge creation: The case of Hamamatsu Photonics. *International Journal of Technology Management*, 30(3-4), 248-264.
- Nonaka, I., & Toyama, R. (2002). A firm as a dialectic being: Towards a dynamic theory of the firm. *Industrial and Corporate Change*, 11, 995–1109.
- Nonaka, I., & Toyama, R. (2003). The knowledge-creating theory revisited: Knowledge creation as a synthesizing process. *Knowledge Management Research & Practice*, 1(1), 2–10.
- Nonaka, I., Toyama, R., & Nagata, A. (2000). A firm as a knowledge creating entity: A new perspective of the theory of the firm. *Industrial and Corporate Change*, 9(1), 1–20.
- Porter, M. E. (1980). Competitive strategy. New York, NY: Free Press.
- Porter, M. E. (1985). Competitive advantage: Creating and sustaining superior performance. New York, NY: Free Press.
- Rodríguez, G., Gil, J., & García, E. (1996). *Metodología de la Investigación Cualitativa*. Archidona, Málaga, España: Ediciones Aljibe, S.L.
- Senge, P. M. (2006). The fifth discipline: The art and practice of the learning organization (2nd ed.). New York, NY: Currency/Doubleday.

- Senge, P. M., Scharmer, C. O., Jaworsky, J., & Flowers, B. S. (2005). *Presence: An exploration of profound change in people, organizations and society*. New York, NY: Currency/Doubleday.
- Strebel, P. (1992). Breakpoints: How managers exploit radical business change. Boston, MA: Harvard Business School Press.
- Womack, P. J., & Jones, D. J. (1996). Lean thinking. New York, NY: Simon and Schuster.
- Woodside, A. (2010). Case study research: Theory, methods and practice. Bingley, UK: Emerald Group Publishing Limited.
- Woodside, A. G., Pattinson, H. H., & Miller, K. E. (2005). Advancing hermeneutic research of interpreting interfirm new product development. *Journal of Business & Industrial Marketing*, 20, 364–379.
- Zuber-Scherrit, O. (2001). Action learning and action research: Paradigm, praxis and programs. In S. Sanskaran, B. Dick, R. Passfield, & P. Svenson (Eds.), Effective change management using action research and action learning: Concepts, frameworks, processes and applications (pp. 1–20). Lismore, Australia: Cross University Press.
- Zuber-Scherrit, O. (2007). A model for designing action learning and action research programs. *The Learning Organization*, 9(4), 143–149.